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U. S. DEPARTMENT OF THE INTERIOR

**ANNUAL REPORT OF THE
COMMISSIONER OF RECLAMATION
TO THE SECRETARY OF THE INTERIOR
FOR FISCAL YEAR ENDED JUNE 30, 1925**

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DEPARTMENT OF THE INTERIOR

HUBERT WORK, SECRETARY

BUREAU OF RECLAMATION

ELWOOD MEAD, Commissioner

TWENTY-FOURTH ANNUAL REPORT

OF THE

BUREAU OF RECLAMATION

Transmitted to Congress in pursuance of the
Act of June 17, 1902 (32 Stat. 388)

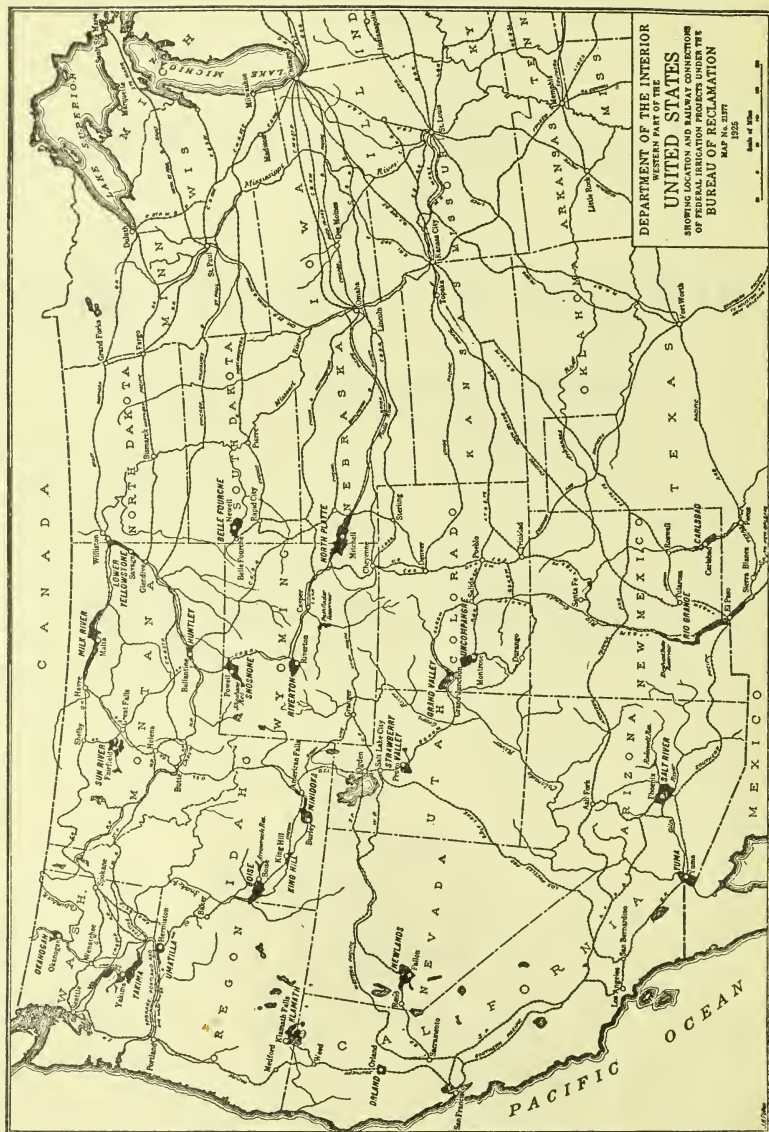
FOR THE

FISCAL YEAR ENDED JUNE 30, 1925



WASHINGTON
GOVERNMENT PRINTING OFFICE

1925



DEPARTMENT OF THE INTERIOR
WESTERN PART OF THE
UNITED STATES
SHOWING LOCATION AND RAILWAY CONNECTIONS
OF FEDERAL IRRIGATION PROJECTS UNDER THE
BUREAU OF RECLAMATION

MAP No. 21577

1925

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TWENTY-FOURTH ANNUAL REPORT
OF THE
BUREAU OF RECLAMATION

DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
October 14, 1925.

SIR: The land irrigated from Federal reclamation works in 1924 produced crops worth nearly \$110,000,000. This is an increase from the previous year of more than \$7,000,000. The value of the crops grown in 1925 will be considerably greater than in 1924. This will result from the increase in the cultivated acreage and the improvement in prices.

Another evidence of economic improvement is the large number of factories and extensions of old industries on nearly all the projects. The following is a partial list:

Yuma project, Arizona-California.—The two old ice plants each increased their activities from 157 tons to 275 tons per 24 hours, most of which is purchased by the Pacific Fruit Express Co. for icing cars. The icing shed was extended to 3,080 feet, which permits icing facilities for 140 cars at one time.

Grand Valley project, Colorado.—Two creameries and a cannery were established. In addition, industries operated during the year comprised 4 creameries and stations, 2 flour mills, 1 sugar factory, 3 canneries, 2 packing houses, the beet growers' association, the Colorado Potato Growers' Exchange, the farm bureau, and a cow-testing association.

Boise project, Idaho.—A canning factory was established at Wilder and a new creamery and a cold-storage plant for handling poultry and eggs at Caldwell.

Minidoka project, Idaho.—A new creamery was established and two cooperative associations organized—the Idaho-Oregon Poultry Producers' Association and the Cassia County Beet Growers' Association.

Huntley project, Montana.—An egg-marketing association was organized.

Milk River project, Montana.—The erection of a sugar factory at Chinook was commenced early in 1925. A seed potato marketing association, which formerly did not embrace project lands, is increasing its activities, and a small acreage of seed potatoes will be grown on the project in 1925.

Lower Yellowstone project, Montana-North Dakota.—A cheese factory was established at Fairview. A beet-sugar factory was being erected at Sidney to handle the 1925 crop. Salting stations for pickles were being erected at Savage, Sidney, and Fairview.

North Platte project, Nebraska-Wyoming.—A cheese factory was established north of Minatare, the product being handled by an Omaha commission company. The South Sioux Poultry Association was organized by farmers on the Interstate division and is meeting with success.

Carlsbad project, New Mexico.—Three cotton gins were built during the year.

Rio Grande project, New Mexico-Texas.—Twenty cotton gins are in operation on the project, as well as a large cotton mill and two cottonseed-oil mills. A cooperative dairy association has been established, and a butter and ice-cream factory. Other organizations comprise alfalfa-hay associations, cotton associations, and poultry organizations.

Belle Fourche project, South Dakota.—Pickle-salting stations have been erected and the industry began with record yields of cucumbers that brought the growers as high as \$450 per acre in 1925.

Strawberry Valley project, Utah.—A large canning factory was constructed near Spanish Fork City by the Utah Packing Corporation, a subsidiary of the California Packing Co.

Okanogan project, Washington.—A creamery was established during the year.

Shoshone project, Wyoming.—A portable alfalfa-meal mill was erected.

There are other hopeful indications. More acres are under cultivation. Yields in 1925 promise to be excellent, and prices are satisfactory. The value of the cotton crop on the Rio Grande project is estimated at \$12,000,000, which almost equals the cost of the works. The cherry crop on the Yakima project brought \$700,000, and the entire crop of the Yakima Valley, which includes the project, is expected to bring \$40,000,000. A considerable part of this crop is marketed by 16 cooperative organizations. The beet-sugar factory built this year on the Lower Yellowstone project is adding to the acres irrigated and improving methods of tillage. On nearly all projects helpful influences are lessening the financial tension under which reclamation farmers have struggled for the past three or four years.

In the following table the farms on the projects are classified, in accordance with the crop results obtained, into poor, fair, good, and average. By "poor" is meant a crop yield on a farm less than one-half the average for the project as a whole; by "fair" a yield one-half the average but less than the average for the project; by "good" a yield equal to the average but less than one and one-half times the average for the project; and by "excellent" a yield one and one-half or more times the average of the project.

Crop results, 1924, on irrigation projects

State	Project	Poor		Fair		Good		Excellent	
		Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Arizona	Salt River	63	1.0	4,095	65.0	1,890	30.0	252	4.0
Arizona-California	Yuma	225	17.9	475	37.8	536	42.6	21	1.7
California	Orland	153	25.1	211	34.6	137	22.4	109	17.9
Colorado	Grand Valley	50	12.4	203	50.2	103	25.5	48	11.9
Do	Uncompahgre	370	23.2	664	41.5	330	20.6	235	14.7
Idaho	King Hill	38	20.2	56	29.8	67	35.7	27	14.3
Do	Minidoka:								
	South side	161	18.4	376	42.9	249	28.4	90	10.3
	Gravity	127	9.0	593	42.0	494	40.0	198	14.0
Idaho-Oregon	Boise	540	20.0	1,081	40.0	811	30.0	270	10.0
Montana	Huntley	144	25.6	166	29.5	146	25.9	107	19.0
Do	Milk River ¹	89	25.4	90	25.8	67	19.1	104	29.7
Do	Sun River	47	9.4	215	43.1	168	33.7	69	13.8
Montana-North Dakota	Lower Yellowstone	130	22.5	237	41.1	169	29.3	41	7.1
Nebraska-Wyoming	North Platte	987	43.5	558	24.5	352	15.5	377	16.5
Nevada	Newlands	215	28.2	200	26.2	300	39.4	47	6.2
New Mexico	Carlsbad	61	14.8	132	32.0	170	41.3	49	11.9
New Mexico-Texas	Rio Grande	824	20.0	824	20.0	2,059	50.0	412	10.0
Oregon	Umatilla	68	12.8	216	40.4	174	32.6	76	14.2
Oregon-California	Klamath	70	14.4	185	38.2	200	41.2	30	6.2
South Dakota	Belle Fourche	165	21.4	380	49.3	129	16.8	96	12.5
Utah	Strawberry Valley	200	9.0	1,500	67.4	500	22.5	24	1.1
Washington	Okanogan	168	45.5	72	19.4	52	14.0	78	21.1
Do	Yakima:								
	Sunnyside	1,000	29.4	1,000	29.4	1,000	29.4	391	11.5
	Tieton	147	11.3	555	42.7	434	33.3	165	12.7
Wyoming-Montana	Shoshone	166	20.3	343	41.8	168	20.5	143	17.4
	Total	6,208	17.8	14,427	41.5	10,705	30.8	3,459	9.9

¹ Exclusive of Chinook division.

In general the table calls attention to the larger percentages of good and excellent yields on the farms in the Southwest and the Pacific Coast States, where cotton and fruit predominate. It also indicates that even on those projects where the worst agricultural and economic conditions prevail, there is an appreciable percentage of settlers who produce crops well above the average for the project.

This favorable financial outlook leads the bureau to believe that the time has come for constructive action in improving certain social and economic conditions on reclamation projects. The foremost of these is the closer settlement of the land on certain existing projects by farmers who will be owners and able to cultivate the land intensively, which is the only way that success in irrigation can be achieved. On several of the projects where water has been supplied for more than 10 years, less than half of the fertile soil is being cultivated by irrigation. On several projects more than half of the land is being cultivated by tenants who lack capital and the incentive which ownership gives to properly develop the farms and create the most satisfactory social conditions. On a number of projects tracts are held by individuals largely in excess of the farm unit established by law. During the agricultural depression through which we have passed, subdivision could not be insisted upon because purchasers could not be found. Now that better times seem to have come, this disregard of the law should cease.

THE FINANCIAL SITUATION AND MEASURES FOR ITS IMPROVEMENT

During the last five years, on one-third of the Federal reclamation projects, there has been a progressive falling off in payments due the Government from water users. Delinquencies on all projects for this brief period amount to the staggering total of \$8,652,000. In 1924 it increased over \$3,000,000. Some projects have paid all their assessments while others have paid practically nothing.

These delinquencies fall into two groups. In the first, water users are unable to pay from causes beyond their control, such as poor soil or inadequate water supply which cut down earning power of the land regardless of the efforts of the settler. In the second, conditions can be controlled. On some projects large areas of fertile land are either not farmed at all or very poorly farmed, while on prosperous farms, water users amply able to pay, do not because they lack the desire and because of a belief that delinquencies will be funded into deferred construction payments.

Efforts to improve these conditions are being made. Investigations are in progress to determine the areas of land unfit for cultivation or for which a water supply is lacking or inadequate. When these have been concluded, recommendations will be made to Congress for charging off money which can not be collected and for temporary suspension of charges which settlers are at present unable to pay. Plans for the closer settlement and better cultivation of neglected areas are being worked out. Where payment of delinquencies is reasonably possible this is being insisted upon.

The accompanying tables show the financial condition of the various projects. Two give the assessments for construction and operation for the year 1924, due on June 30, 1925, and the payments made on these assessments. The other two give similar assessments and payments for the five-year period, 1920 to 1924, inclusive.

Construction water-right charges due for the year 1924, charges paid and uncollected, and percentages paid

Project	Charges due	Paid	Uncollected June 30, 1925	Per cent paid
Salt River.....	\$609,961.32	\$609,961.32	-----	100.0
Rio Grande.....	153,714.60	153,714.60	-----	100.0
Klamath.....	64,749.76	63,773.81	\$975.95	98.5
Carlsbad.....	58,099.37	44,712.81	13,386.56	77.0
Yuma.....	302,300.99	224,720.47	77,580.52	74.3
Yakima.....	393,980.45	249,209.87	144,770.58	63.3
Orland.....	66,552.92	36,757.03	29,795.89	55.2
Newlands.....	62,063.65	32,912.61	29,151.04	53.0
Huntley.....	32,149.01	16,057.47	16,091.54	49.9
Strawberry Valley.....	155,390.08	66,551.35	88,838.73	42.8
Sun River.....	15,679.91	5,984.54	9,695.37	38.2
Minidoka.....	330,634.61	98,597.91	232,036.70	29.8
Uncompahgre.....	112,183.03	24,174.34	88,008.69	21.5
Boise.....	693,241.07	119,917.88	573,323.19	17.3
Belle Fourche.....	137,112.28	19,582.23	117,530.05	14.3
Shoshone.....	110,979.22	8,408.14	102,571.08	7.6
North Platte.....	443,896.69	26,588.67	417,308.02	6.0
Umatilla.....	41,571.55	1,127.56	40,443.99	2.7
Okanogan.....	11,403.67	68.88	11,334.79	.6
King Hill.....	40,000.00	-----	40,000.00	-----
Lower Yellowstone.....	27,981.40	-----	27,981.40	-----
Williston.....	5,816.07	-----	5,816.07	-----
Total.....	3,869,461.65	1,802,821.49	2,066,640.16	46.6

Operation and maintenance charges due for the year 1924, charges paid and uncollected, and percentages paid

Project	Charges due	Paid	Uncollected June 30, 1925	Per cent paid
Rio Grande.....	\$162,591.53	\$162,591.53	-----	100.0
Grand Valley ¹	51,929.83	49,109.50	\$2,820.33	94.6
Milk River ¹	17,007.43	15,694.59	1,312.84	92.3
North Platte (Fort Laramie) ¹	61,608.09	53,899.24	7,708.85	87.5
Orland.....	33,276.44	26,509.60	6,766.84	79.7
Carlsbad.....	51,227.06	40,571.49	10,655.57	79.2
Sun River (Greenfields) ¹	17,638.46	13,322.03	4,316.43	75.5
Yuma.....	312,860.53	219,640.87	93,219.66	70.2
Yakima.....	261,362.85	171,385.23	89,977.62	65.6
Huntley.....	36,268.99	23,133.44	13,135.55	63.8
Minidoka.....	124,173.10	77,041.47	47,131.63	62.0
Newlands.....	117,514.50	62,565.72	54,948.78	53.2
Strawberry Valley.....	41,337.00	20,833.35	20,503.65	50.4
Uncompahgre.....	137,929.56	67,417.57	70,511.99	48.9
Sun River (Fort Shaw).....	11,994.57	5,200.01	6,794.56	43.4
Belle Fourche.....	76,285.48	22,771.80	53,513.68	29.9
Shoshone.....	51,272.47	15,080.82	36,191.65	29.4
Boise.....	164,134.74	41,131.60	123,003.14	25.1
North Platte (excluding Fort Laramie).....	207,169.79	50,927.70	156,242.09	24.6
King Hill.....	30,654.98	4,527.50	26,127.48	14.8
Klamath.....	37,756.47	3,443.77	34,312.70	9.1
Umatilla.....	19,594.84	231.13	19,363.71	1.2
Okanogan.....	24,407.50	157.50	24,250.00	.6
Lower Yellowstone.....	42,335.12	-----	42,335.12	-----
Williston.....	14,600.43	-----	14,600.43	-----
Total.....	2,106,931.76	1,147,187.46	959,744.30	54.4

¹ On water rental basis.

Construction charges due, paid, and uncollected, for 5-year period 1920-1924

Project	Charges due	Charges paid	Uncollected June 30, 1925	Per cent paid
Salt River.....	\$1,696,222.64	\$1,696,222.64	-----	100.0
Rio Grande.....	472,345.20	472,345.20	-----	100.0
Klamath.....	267,328.30	263,866.28	\$3,462.02	98.7
Carlsbad.....	280,665.81	266,660.00	14,005.81	95.0
Orland.....	288,395.98	258,600.09	29,795.89	89.7
Yuma.....	1,086,230.74	962,049.21	124,181.53	88.6
Yakima.....	1,902,955.10	1,647,967.58	254,987.52	86.6
PROJECTS WHICH HAVE PAID LESS THAN 85 PER CENT				
Newlands.....	237,812.64	185,736.34	52,076.30	78.1
Strawberry Valley.....	591,162.55	383,007.92	208,154.63	64.8
Huntley.....	141,240.55	89,401.50	51,839.05	63.3
Minidoka.....	1,508,971.04	923,056.31	585,914.73	61.2
Sun River.....	58,376.53	34,689.01	23,687.52	59.4
Okanogan.....	36,065.74	19,218.69	16,847.05	53.3
Boise.....	2,402,012.37	1,179,276.48	1,222,735.89	49.1
Umatilla.....	282,388.52	104,842.37	177,546.15	37.1
North Platte.....	1,964,223.13	701,889.67	1,262,333.46	35.7
Uncompahgre.....	370,587.54	121,064.15	249,523.39	32.7
Shoshone.....	496,964.84	161,732.62	335,232.22	32.5
Lower Yellowstone.....	60,725.26	9,530.62	51,194.64	15.7
Belle Fourche.....	¹ 593,787.80	80,789.84	¹ 512,997.96	13.6
King Hill.....	40,000.00	-----	40,000.00	-----
Williston.....	5,816.07	-----	5,816.07	-----
Total.....	14,784,978.35	9,562,646.52	5,222,331.83	64.7

¹ \$331,615.52 deferred to be paid as supplemental construction.

NOTE.—Grand Valley project, Milk River project, Greenfields division of Sun River project, and Fort Laramie division of the North Platte project on water-rental basis. No construction charges assessed.

Operation and maintenance charges due, paid, and uncollected, for 5-year period 1920-1924

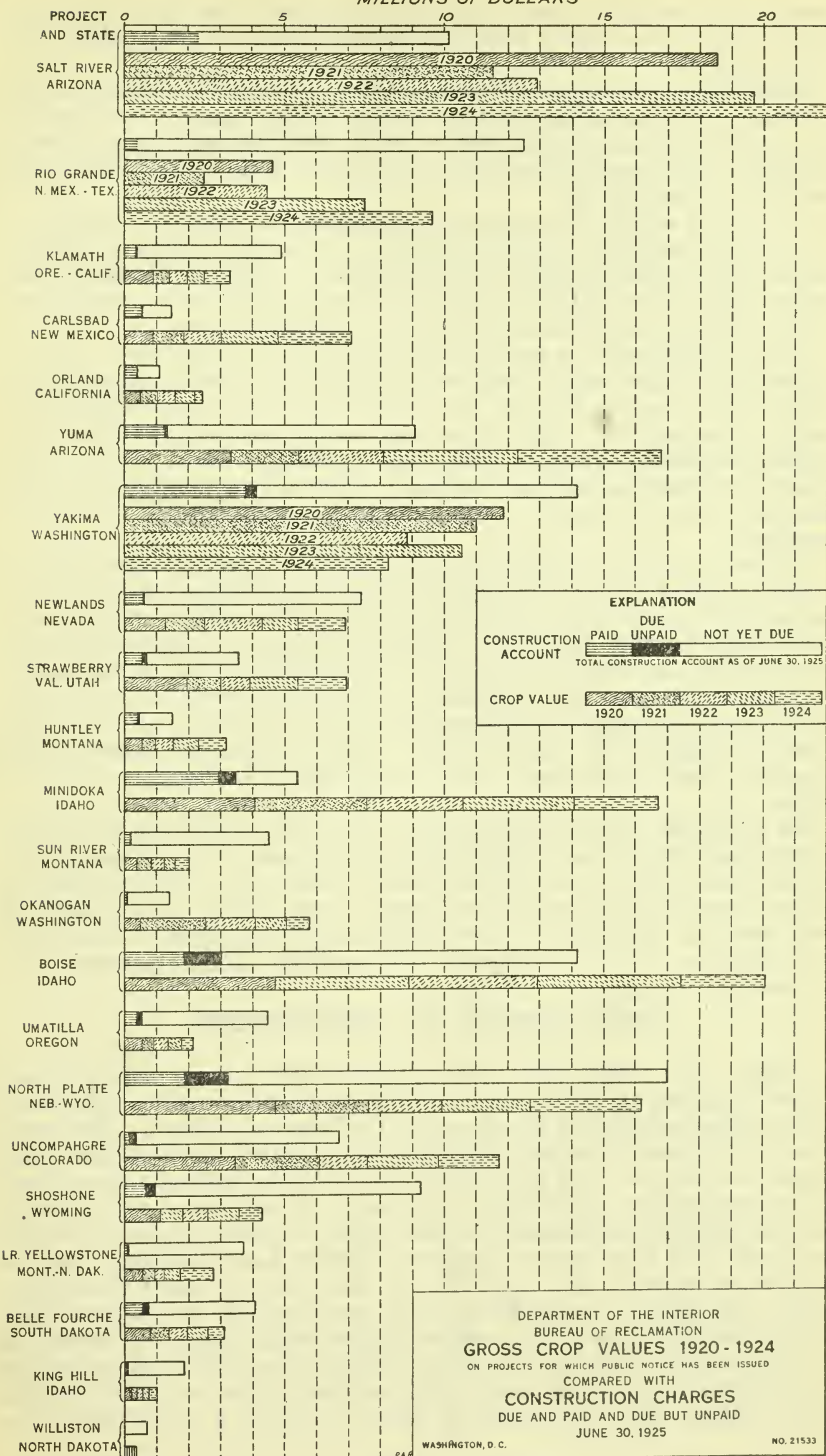
Project	Charges due	Charges paid	Uncollected June 30, 1925	Per cent paid
Rio Grande-----	\$809,145.80	\$802,057.94	\$7,087.86	99.1
Orland-----	187,654.75	180,887.91	6,766.84	96.4
North Platte: Fort Laramie ¹ -----	219,047.00	211,042.00	8,005.00	96.3
Carlsbad-----	273,811.45	262,709.84	11,101.61	96.0
Grand Valley ¹ -----	255,040.00	227,997.00	27,043.00	89.4
Klamath-----	306,983.70	271,770.18	35,213.52	88.5
Yuma-----	1,386,997.72	1,216,753.54	170,244.18	87.7
Yakima-----	1,307,430.11	1,141,232.54	166,197.57	87.3
Milk River ¹ -----	109,855.00	95,218.00	14,637.00	86.7
PROJECTS WHICH HAVE PAID LESS THAN 85 PER CENT				
Strawberry Valley-----	260,275.22	207,540.66	52,734.56	79.7
Newlands-----	565,733.97	449,729.51	116,004.46	79.4
Okanogan-----	221,188.20	172,703.12	48,485.08	78.1
Umatilla-----	184,284.20	135,701.22	48,582.98	73.6
Minidoka-----	794,855.72	561,678.87	233,176.85	70.7
Boise-----	1,412,782.70	959,907.37	452,875.33	67.9
Sun River: Fort Shaw-----	71,221.78	44,668.43	26,553.35	62.7
Huntley-----	251,516.61	156,419.31	95,097.30	62.2
Sun River: Greenfields ¹ -----	66,573.00	38,726.66	27,846.34	58.2
Uncompahgre-----	295,046.36	164,923.22	130,123.14	55.9
King Hill-----	124,951.23	60,551.12	64,400.11	48.5
North Platte-----	1,054,253.27	460,063.87	594,189.40	43.6
Shoshone-----	359,494.33	154,245.49	205,248.84	42.9
Belle Fourche ² -----	562,519.83	86,864.02	475,655.81	15.4
Williston-----	191,058.07	16,576.58	174,481.49	8.7
Lower Yellowstone-----	254,909.55	16,381.31	238,528.24	6.4
Total-----	11,526,629.57	8,096,349.71	3,430,279.86	70.2

¹ Project on water-rental basis.² \$396,660.89—deferred to be paid as supplemental construction.

These tables show that for 1924 less than half of what was due on construction and only 54 per cent of what was due for operation and maintenance was paid by water users. This is a serious situation. The causes of these delinquencies need to be understood by all who believe in Federal reclamation and desire to see it continued. Why, for example, should seven projects pay more than 85 per cent of all the Government's charges during the five-year period of agricultural depression, while six paid less than half of the charges assessed for operating them during that period? Last year the Rio Grande project paid all it owed the Government while the Lower Yellowstone and Williston projects paid nothing. Why for 1924 should five projects pay from nothing to less than 10 per cent of the charges assessed for supplying irrigators with water? Efforts to collect from these projects have disclosed the reasons for these wide discrepancies.

On some projects there has been real distress, but these are not the projects where least payments were made. There are others where powerful influences seek on various pretexts to evade paying. On one project the water users organization in an appeal for blanket deferment said: "Not one irrigator on this project can pay anything." This request was denied but water users were told that individual applications showing the reasons for nonpayment would be carefully considered. Thousands of dollars came at once into the reclamation treasury from those who could not make such a showing. One applicant asked for two years' deferment on a water charge of \$7.50, which only required a cash installment of \$1.50. On another project owners of fine farms with the best crops in years refused to pay a cash install-

MILLIONS OF DOLLARS



ment of \$15 on last year's operating charges. One who had paid asked to have his money refunded because others equally able were not paying.

During the year a few collection suits were started. Not one came to trial. The promptness with which water charges varying in amount from more than \$1,500 to nearly \$10,000 were paid showed that they could readily have been paid in the four or five years they had been accumulating.

This is the sordid, unhappy side of reclamation finances. It grows out of the mistaken mental attitude that water users on Federal projects are "children of the Government." What is needed is discrimination between this class and the hundreds of worthy, struggling settlers who are entitled to sympathetic consideration.

The worthy settler is not helped by laxness in collections. When 40 per cent of the water users on a project pay their charges we are obligated to them to find out why the other 60 per cent refrain from paying, and equally obligated to insist on payments from those in a similar position. That is what was attempted this year. Altogether too many cases were disclosed where no payments have been made for years by people amply able to pay but who have evaded payment.

Failure to enforce collection of charges for operation and maintenance expenses is the outstanding reason why less than one-fourth of the land on one project is being irrigated. The owners of the unirrigated three-fourths do not have to act as long as it costs nothing to own land in an irrigated area. This explains why the lands under some canals have never contributed to operating costs. This condition prevails on projects with good soil, plenty of water and favoring climate. Rigid collections of charges for operation and maintenance expenses would soon put an end to untilled fields and unoccupied farms.

On a number of these projects more than half of the land is held by nonresident owners and cultivated by tenants. Failure to collect water charges does not help the tenant cultivator. The benefit of laxness goes to the nonresident owners, some of whom are men of large means. Confidence is felt that an understanding of the financial situation on these projects will result in a great increase in payments.

THE DANGERS OF MORATORIUMS

During 1921, 1922, and 1924, projects having large delinquencies urged Congress to grant moratoriums on past due debts, and laws were passed permitting postponement of such payments. The purpose of Congress was commendable, but there is no question that these acts have worked injustice to the debt paying water user, and have demoralized reclamation finances. These measures did not provide proper consideration for the water user who at great sacrifice had paid the Government charges. Relief was extended only to such water users as had not paid. If the failure to meet these payments was due to causes beyond the water user's control, this discrimination in favor of the nondebt payer would not have caused ill feeling, but when the hard-working settler, often with a large family of children, has paid his assessment and learns that a banker on the same project who owns several farms, is given a moratorium, he

feels that he has been wronged, that political pull counts, and he joins the opposition to collections.

Although these acts permitted blanket moratoriums; that is, all who owed the Government secured general postponement, no refund of money was provided to equally poor and equally deserving water users who had with great sacrifice made their payments. The result has been a lowered morale and a dangerous increase in the repudiation ranks.

An effort has been made to inform water users of the financial situation and to bring about the prompt payment of current operation and maintenance charges. In all private irrigation enterprises, such charges must be collected in advance because that is the only way in which money for operation can be secured. Congress has indicated clearly that advance operation payments should be required on reclamation projects and this is being brought about as rapidly as possible.

As the first step toward this, water users were advised early in the present year that thereafter no blanket deferment of payments would be granted to those who were in arrears; but that relief, where granted, would be to individuals, and only on a satisfactory showing by the individual, that he was unable to pay. It was felt that the settler who was living on the land and cultivating his own crops was entitled to more sympathetic consideration than the nonresident landowner whose farms were cultivated by tenants or the owner of tracts of land in excess of the homestead unit.

The law authorizing deferments, passed in 1924, permitted carrying over to 1925, 1926, and 1927, the debts of those who were delinquent for charges due prior to March, 1924, with reduction of penalty from 12 to 5 per cent per annum. For the time being this eliminated all arrears on approved applications. An earlier law provides that charges must be more than one calendar year in arrears before delivery of water can be withheld. This explains the reason for the small collections of construction charges on seven of the projects and of operation and maintenance charges on five of them in 1924. Many settlers, although not compelled to pay, voluntarily chose to do so, and this explains the payments on some projects where a moratorium on all arrears had been granted.

The granting of relief only on satisfactory individual showings imposed on the bureau the most difficult and exacting duty it has been required to perform since Federal reclamation began. Thousands of individual applications were filed. All these had to be considered by project officials and reviewed in Washington. They showed that many were entitled to sympathetic consideration; but they also uncovered many grave abuses. Water users amply able to pay had for four, five, or six years paid nothing. Some had private debts requiring interest payments which were given preference. A strong local sentiment exists on some projects in favor of keeping the money at home rather than paying it to the Government and taking it from the community. How extensive these credit transactions of the bureau have been is shown by the fact that the deferred payments granted under the operation of the so-called relief or deferment act of 1924, amount in the aggregate to \$4,837,000.

Whatever Congress may decide to do about granting deferments on construction charges, nothing should interfere with authority to require annual payments of operation and maintenance charges on every project more than five years old. Operating these projects with money taken from the reclamation fund is unfair to irrigators of private projects, who have furnished the money to build their works and must pay annually all their expenses. It is also unfair to the great body of farmers throughout the country who have neither aid nor subsidy in their farming operations. It has created a tendency to make the Bureau of Reclamation not an organization for service, but a credit agency that should not seek to collect its charges until other pressing obligations of water users have been met. No Government enterprise can be administered on this basis and on none other is there any thought of doing so. Letters are not carried free by the Post Office Department because it is inconvenient for the sender to buy a stamp. People do not travel on Government-owned ships without paying for transportation because they can ill afford the money required. The Government operation of reclamation projects can not continue unless operation and maintenance expenses are paid yearly and in full and they should be paid in advance.

Insistence on payment of charges during the past year has led to the collection of hundreds of thousands of dollars that otherwise would not have been paid. Instead of discouraging water users, it has increased the confidence of those who have paid and endeavor to pay, and it has helped to maintain the morale of this bureau. There was only one instance of active resistance. This occurred on a project where the payment of a small charge for drainage was required. Other charges aggregating over three quarters of a million dollars had been postponed. After several months of negotiation without securing an agreement, notice was given that the payment of this charge must be made, but that it could be paid in five monthly installments, beginning July 1. The notice stated that if the first of these installments was not paid on that date, water would be shut off. There was considerable objection on the part of some water users, who finally secured an injunction in the State court against closing the headgates of those who refused to pay. The number of these was, however, small—only 170 resisted paying out of more than 3,000 accounts. The legality of the bureau's action was later sustained by the Federal court, and practically all such payments have since been made.

Enforcing collections is an unpleasant duty, but the integrity of reclamation requires it. To close our eyes to the accumulation of arrears is not only a violation of duty, but an injury to water users. It tends to build up a debt they can not overcome, and discredits the whole reclamation policy.

THE SITUATION OF SETTLERS LOCATED ON WORTHLESS LAND

The relief extended to settlers located on worthless land, under subsection K of the fact finders' act, is to relieve them from paying construction costs. This is not what they need, because providing free water would not enable them to make a living. What these settlers should have is aid in shifting to a farm where they can make a living.

Some of these worthless lands were privately owned when the Government constructed the irrigation systems, but most of them were unentered public lands. On the privately owned land the Government has not the moral obligation to the extent it has on the land it represented as irrigable to the homesteaders, and possibly on privately owned lands should only lose its investment in the irrigation works.

At present these worthless lands are largely abandoned but scattered over them are a certain number of persistent resident owners, still trying to make a living. They are doomed to certain failure. Sooner or later they will have to move on. Some have lived on their farms for 15 years, working for others almost continuously. Existing laws now permit the relinquishment of holdings where the irrigable area has been reduced to less than 20 acres, and the transfer of rights and payments to better lands, if available, within the State. There is, however, very little good public land that may be used for this purpose. Even if other good lands were available in sufficient areas to take care of these unfortunate settlers, they have no money with which to make the new development. These conditions justify consideration for these settlers.

If some measure of relief could be formulated whereby settlers so situated would be assisted to move to other projects, located on good land, and to improve and bring into cultivation a new farm, it would remove one of the most distressing consequences of unwise settlement in the past and greatly reduce operation costs by making it possible to abandon ditches that will have to be kept in use as long as these settlers remain.

ENGINEERING, AGRICULTURAL, AND ECONOMIC NEEDS

SALT RIVER PROJECT

(Operated by the Salt River Valley Water Users' Association)

Engineering and financial.—No period in the history of this project has been marked by greater progress. The entire \$7,000,000 power development program, for which definite plans were started in 1920, will be completed shortly. The initial unit under the first bond issue of \$1,800,000 was completed when the Mormon Flat Dam was finished in January. A \$500,000 power plant at the dam, financed by the presale of power, will be completed by spring. The Horse Mesa Dam and power plant are under construction and are financed by a \$4,743,000 bond issue. These developments will bring the project power system up to 82,000 horsepower.

Agricultural and economic.—This is one of the most successful of the irrigation projects. Farming is diversified, the climate permitting cultivation during the entire year. The major crops are cotton, alfalfa, grain, citrus and deciduous fruits, cantaloupes, grapes, small fruits, and vegetables. The water users are prosperous and progressive.

YUMA PROJECT

Engineering.—The irrigation system planned for this project has been completed. Additional drainage may be needed on the reservation division. The completion of the drainage system on the Yuma Valley division has been provided for. A workable plan is needed for the control of silt and water grass, which now

makes the operation and maintenance of the distribution system difficult and expensive. Experimentation with concrete lateral lining is now in progress.

The cost of maintaining the levees of the Colorado River, to confine it to its course and prevent flooding of adjacent lands, has been a serious financial burden on the water users of this project. Legislation was enacted to relieve them of part of this cost, but appropriations are required to make this effective.

Agriculture.—This project has a long growing season. The principal crops are cotton, alfalfa, and alfalfa seed. Lettuce is grown and sold in carload lots. Conditions are particularly favorable to dairying, because of the absence of cold or stormy weather.

Financial and economic.—The Yuma project has made a fine record in meeting its obligations to the Government. The total charges assessed for construction and for operation and maintenance for the five-year period, 1920 to 1924, amount to \$2,473,228.46, of which \$2,178,802.75 has been paid and only \$294,425.71 remains uncollected. The payments for this difficult period are a little more than 88 per cent of the amounts assessed. Proximity to the Pacific coast cities insures a favorable market for stock and many of the products produced.

About 49 per cent of the irrigated farms on the project are cultivated by tenants. Many of these tenants have no permanent interest in the conditions needed to make local communities more satisfactory for the wives and families of the resident farm owners.

Recommendation.—Efforts to give effect to the law prohibiting ownership of more than a single farm unit by one individual, and to attract farm buyers to this section, are imperative and are being made.

YUMA MESA PROJECT

Engineering.—The Yuma Mesa auxiliary project was authorized by the act of January 25, 1917, as amended February 11, 1918, and embraces about 45,000 acres of land south and southwest of Yuma, Ariz. Lands in the first unit, comprising 6,400 acres, were designated for sale on December 10, 1919, at a minimum price of \$25 per acre and an additional cost of \$200 per acre for construction charges. The chief construction need at present is the early completion of the hydroelectric power plant to provide energy for pumping operations. The construction of this plant has been provided for. Distribution system has been completed for 3,800 acres. Additional canals, laterals, and ditches should be constructed and concrete lined when the lands now served with water are cultivated and additional lands are required for settlers.

Financial and economic.—Of the total acreage held in private ownership in the "A" unit, less than 1,000 acres are in cultivation. The cultivated area is planted chiefly to grapefruit, oranges, dates, grapes, and early winter vegetables. The character of the soil and comparatively frost-free conditions make it possible, with good cultural methods, to obtain large yields of excellent quality grapefruit.

Recommendations.—Authority is needed to construct ditches or pipe lines to clear, level, and make ready for planting additional

land in "B" unit owned by the Government. This should be followed by an intensive campaign for its sale and development by purchasers amply supplied with funds. The need for adequate capital is manifest when it is realized that the development of a 10-acre grapefruit grove requires the expenditure of approximately \$10,000 in addition to the cost of the land and water right. Syndicate development of these lands has proved very successful and steps are being taken to extend this method of development.

ORLAND PROJECT

Engineering.—The extreme water shortage of 1924 demonstrated that the imperative need of the project is hold-over storage. Studies indicate that the situation can be met most economically by development of 50,200 acre-feet of storage on Stony Creek at the Stony Gorge Reservoir site. A preliminary appropriation of \$50,000 has been made and plans made to perform the work as supplemental construction, agreements for which have been circulated among the water users. Of the 796 ballots issued, 687 were returned. Of these 660 were in favor of the work, 25 against, and 2 ballots were rejected. Of the 25 negative ballots all but two were cast by nonresident land-owners, indicating an almost universal sentiment among resident property owners in favor of the proposed reservoir.

Agriculture.—This locality has a long growing season and part of it is producing citrus fruits commercially. Other crops grown are alfalfa, small grains, deciduous fruits, nuts, melons, and vegetables.

Financial and economic.—Owing to adverse conditions prevailing on the project from drought during 1924, the water users for the first time were unable to meet their charges on the due date. Notwithstanding the depressed condition of agriculture operation and maintenance collections for the five-year period 1920 to 1924 amounted to more than 96 per cent of the total. Ninety per cent of the construction installments have been paid.

Recommendation.—Construction of Stony Gorge Reservoir should be rushed.

GRAND VALLEY PROJECT

Engineering.—To complete this project as originally planned would require the construction of a hydroelectric power plant, a number of pumping stations, and a lateral system for some 8,500 acres under pumping and 1,650 acres under gravity extension. No further construction is now contemplated on the irrigation system, but additional drainage will be required when all lands are being irrigated. Construction costs for the land under the gravity system should, therefore, be fixed on a basis of work completed plus the estimated cost of the additional drainage. The construction work on the Orchard Mesa division will be completed during the fiscal year 1926. There remain to be finished the enlargement of the distribution canal, the replacement of two pumping units, and the excavation of tail race and spillway. A small amount of drainage work is necessary.

Agriculture.—There are approximately 32,000 acres in the gravity division of which less than 15,000 acres were irrigated in 1924. Good yields of alfalfa, sugar beets, grain, and some of the orchard crops are obtained. The average value of crops for nine years of record amounts to \$45.40 an acre. An early potato has proved profitable. Canneries and a sugar-beet factory serve the project.

Financial and economic.—At least 200 settlers are needed to occupy and cultivate the lands now undeveloped or partly farmed. Some coordinated action to fix the price of privately owned land at its productive value and to obtain settlers for these areas is urgently needed. Provision for long-time and intermediate credit is needed for both the new settlers and those now living on the project who are heavily in debt.

The accruals of operation and maintenance for the four years 1921–1924 amounted to \$214,498, of which \$190,706 has been paid, \$19,113 deferred under act of May 9, 1924, and \$1,859 is delinquent. Charges for the operation and maintenance for 1924 have been paid, excepting \$2,820.

If public notice announcing the construction cost for the gravity division is issued during 1925 under the reclamation extension act the amount of payment required might be more than the water users can pay when added to the instalments of the deferred operation and maintenance charges due March 1, 1926, and March 1, 1927, and the operation and maintenance charge for the current year. If, however, issue of public notice is deferred until after December 1, 1926, the water users will have time to form an irrigation district if desired and effect a contract with the United States under the terms and conditions of the act of December 5, 1924 (43 Stat. 101), which provides for the repayment of the construction cost in accordance with 5 per cent of the average gross acre crop returns. While this date for public notice will make the first construction payment due on December 1, 1927, the distribution of charges between March 1 and December 1 will permit the payments to be made from two crop seasons instead of one.

Recommendations.—Public notice for the gravity division should be issued under the act of December 5, 1924, after December 1, 1926, and the water users should in the meantime make preparations and progress toward taking over the operation and maintenance of the project. An order should be issued to the water users of the Orchard Mesa division in 1926 that construction work has been completed. The assessments for the first repayment installment due under the contract would follow and the amounts due collected.

UNCOMPAHGRE PROJECT

Engineering.—The irrigation system as planned for this project has been completed. A considerable area is seeped and its productivity is impaired. A portion of these seeped areas is poor land and should be eliminated from the project. The remaining seeped areas need drainage. The extent of these lands and the estimated cost of draining them has not been determined because individuals have elected to carry out their own drainage work. Until recently the water users have shown little interest in a comprehensive drainage plan.

Agriculture.—Thus far farming has been confined to the growing of staple farm crops, such as alfalfa, small grains, sugar beets, potatoes, beans, and onions. A small acreage of apples is also in bearing. These crops in some years have had to be marketed at a loss owing to heavy freight and marketing charges. Because of this, crops and products should be produced of relatively high value or concentrated

in form. More and better livestock are needed. Canneries and other industries for the local conversion and preservation of products should be obtained.

Financial and economic.—For the period 1922 to 1924 the uncollected construction charge on this project amounts to \$249,523. The unpaid operation and maintenance charges amount to \$130,123. The principal reason for these huge delinquencies is the blanket moratorium. Another reason is the agricultural depression which was particularly acute on the project owing to its isolated location, making marketing especially difficult. In 1922 there was a pronounced shortage of cars for the movement of agricultural products from the project. As a result of the agricultural depression many good farmers left the project. Another reason for the delinquencies may be found in the high mortgage debt per acre, and the high interest rates charged on these debts. Out of 2,098 farms investigated, 338 had been foreclosed or turned over to the mortgagee in satisfaction of the debt. Nine hundred and thirty-nine of the remaining farms were mortgaged for an average of \$67.14 an acre, or for a total sum of \$3,002,278.94. The average annual interest burden per encumbered farm is \$245.92, or \$5.16 an acre. These mortgages should be converted into long-time amortized loans with a lower rate of interest.

The settlers under the East Canal and Selig Canal systems need favorable consideration. Good roads are scarce and long hauls to shipping stations are numerous. There is also a lack of schools and good water for domestic purposes is not available.

Recommendations.—There is a large area on this project served with canals and water, which experience has shown is unsuited to irrigation farming, and it should be eliminated from the project.

The project should be rehabilitated by putting into effect a comprehensive plan of settlement in which land prices should be based on their productive value and sold as partially improved farms under suitable repayment terms. A source of suitable long-time and intermediate credit should be found for both new settlers and those now residing on the project. The operation and maintenance charges should be collected in advance.

BOISE PROJECT

Engineering.—On the constructed portion of this project additional drainage is needed for a small area, and distribution systems will be required for the Hillcrest and Black Canyon divisions. For the Hillcrest division, storage capacity has been reserved in the Arrowrock Reservoir. Storage eventually will be needed to supplement the natural flow of the Payette River for the Black Canyon division. The Black Canyon power plant, the power from which will be temporarily leased to the Gem irrigation district, will be used ultimately for pumping water to a part of these lands.

Agriculture.—Fruit growing and general farming are both successful on this project. Alfalfa, small grains, potatoes, and corn are the leading crops produced. Dairying is increasing and is one of the most profitable industries.

Financial and economic.—The rapid increase in the indebtedness of this project during the last five years, 1920 to 1924, is a cause of serious concern to this bureau. During that period, \$452,875 of

operation assessments remain uncollected, and \$1,222,735 of construction charges are past due and unpaid. Prior to 1917 this project had paid promptly nearly all of its charges. The project experienced a boom during the high war prices, which burdened purchasers of land with excessive contractual debts that can not be repaid under present farming conditions unless the repayment terms of these debts are modified; many farms are mortgaged because of expansions made at that time and taxes generally are high. There was a serious water shortage in 1924. On this project are 1,347 tenants who cultivate 38 per cent of the irrigated farms. These conditions explain in part the local delinquencies but do not account for the default in water charges made by those who are prosperous. This project can and should make a better financial showing. Natural advantages are not lacking, and it has passed the pioneer stage of development. Conditions and production warrant that operation and maintenance charges should be collected without exception.

Recommendations.—A contract draft has been prepared for the transfer of this project to the water users under district organizations. The water users will be benefited by receiving the repayment plan of construction cost on a basis of 5 per cent of the average gross annual crop returns instead of the 20-year schedule now in effect and the Government will be benefitted by being relieved from operating and maintaining the distribution system.

Because of high freight rates there is a need for canneries and other industries that will permit shipment of products in concentrated form. More livestock should be on farms. The large holdings on this project should be subdivided and 600 settlers secured to completely farm the project.

KING HILL PROJECT

Engineering.—The King Hill project was begun as a Carey Act enterprise. Canals were built and the land settled as a private project. This failed. The settlers were unable to keep the project works in repair. The State, which took over the project, was equally unable to finance the necessary reconstruction. The Bureau of Reclamation was induced to reconstruct the works at an expenditure, in round numbers, of \$2,000,000, the water users on the project agreeing to reimburse the Government. The reconstruction of the project as planned is completed.

Financial and economic.—Of the 263 farms supplied with water for irrigation, 75 are idle. Of the 188 irrigated, 71 are cultivated by tenants.

During the last four years, 1921 to 1924, inclusive, only 48 per cent of operation and maintenance cost has been paid and nothing has been paid on the money advanced for construction. Before the Government took over this project the canal system consisted, to a large extent, of wood flumes and siphons. The deterioration of these and canal breaks caused excessive water delivery losses for several years. This shortage of water greatly reduced crop yields, which, together with the subsequent fall in the prices of agricultural products, burdened these settlers with private debts. The project has a relatively long canal and lateral system for the acreage served, which

causes a high operation and maintenance cost per acre. These conditions explain the poor financial showing made by this project.

Recommendations.—Contract for the operation and maintenance of the project expires December 31, 1925. It should not be renewed.

The shallow soil, unsuited to permanent agriculture, should be eliminated from the project. This would leave an ample water supply for the remaining area.

An improvement in the financial and economic conditions would be brought about by the subdivision of large land holdings and the settlement of these areas by skilled cultivators. Better cultivation should be practiced and more good livestock should be kept on farms. About 75 experienced farmers are needed.

The present mortgages and private debts require adjustment so they can be paid from the profits of farming.

MINIDOKA PROJECT

Engineering.—Settlers complain that the pumping and canal capacities for the south side pumping division are inadequate during the peak of the irrigation season. More electric power is needed for pumping and for use on the project. This can be secured from the development at American Falls or from the construction of another power unit at Minidoka Dam, where at present the full regulating capacity of Lake Walcott is not utilized because at the peak of the irrigation season water in it must be maintained at maximum level to produce the greatest amount of power from the present plant.

The American Falls Reservoir, now under construction, has been financed jointly by the United States, to provide storage and power for the proposed north side pumping division of the Minidoka project, and by various canal companies and irrigation districts requiring additional water to supplement their direct diversions from the Snake River. These companies and districts have paid in cash \$2,543,966.42. The dam will be built to impound 1,700,000 or 1,045,000 acre-feet of water, depending on the amount of advance payments which shall be made by those who have contracted with the United States for water, or upon other arrangements that may be made to finance the cost of the larger storage. The foundation is being provided for the higher dam, but the contractor must soon be notified as to the height of the dam to be built. The larger capacity will ultimately be used to provide for the future development of Snake River Valley.

Agriculture.—The soils of this project are generally deep and fertile. Small grains, potatoes, sugar beets, and alfalfa are successfully grown and produce good yields. The inland location of the project and consequent high freight rates favor the consumption of bulky crops by livestock on the farm. Five cheese factories and two creameries on the project stimulate dairying. Two sugar factories offer a good market to beet growers.

Financial and economic.—The accumulated amounts owing the United States for the period 1920 to 1924 on construction charges are \$585,914, and on operation and maintenance assessments are \$233,177. This large increase in indebtedness in so brief a period of time is serious. It can not be explained through lack of natural

advantages. Few projects equal this one in having a combination of fertile soil, a climate favorable to plant growth, low construction costs, and operating expenses. Much of it is no doubt due to the heavy private indebtedness of water users and the pressure exerted upon them by their creditors. Land values were inflated when the prices of farm products were high. Settlers paid small amounts on the purchase price and are trying to pay the balance due on their contracts out of greatly diminished incomes, with the result often that water charges are not paid. Another reason for the bad financial showing is the high percentage of tenancy. Forty-four per cent of the irrigated farms, or 1,010, are cultivated by tenants. Nearly all the banks on this project failed and wiped out the savings of many settlers. In cases where the water users could pay and have not done so it is because their neighbors were not paying and they believed the delinquencies would be funded with the construction account.

Recommendations.—The American Falls Reservoir should be financed for the larger capacity which will be needed for the full development of the Snake River Valley. Water will be provided by this reservoir to supply 125,000 acres of land in the north side pumping division, which should be constructed when the demand for land by settlers increases. More power should be provided and the pumping and distribution system should be enlarged on the south side pumping division. Additional drainage is essential to maintain high productivity on some areas. More farm owners, more livestock, and better improvements and equipment of farms are needed. The mortgages should be refunded as long-term amortized loans with lower rates of interest.

HUNTLEY PROJECT

Engineering.—The irrigation system as planned for this project has been completed, but some betterment work is being gradually accomplished and paid for as a part of operation and maintenance expenses. Scattered areas, totaling about 1,200 acres, are badly in need of drainage, but of this 700 acres are of such poor quality that expenditure for drainage is not advisable.

Agriculture.—The Huntley project was originally settled in small farm units and as a result is one of the best farmed and best-improved projects of the Rocky Mountain region. Much of the land is being intensively cultivated, with a large acreage in sugar beets which produce excellent returns both in tonnage and sugar content.

Financial and economic.—During the 5-year period, 1920 to 1924, about 63 per cent of the payments due on construction, and 62 per cent of payments due on operation and maintenance, have been met. Mortgage foreclosures have caused some of the earlier settlers to lose their farms. This has increased tenancy, and the holding of land in excess of the legal farm unit. Of the 557 irrigated farms on this project, 342, or 61 per cent, are cultivated by tenants. This high percentage of tenancy is both a social and economic disadvantage.

Recommendations.—There are about 5,600 acres of land on this project on which the soil is heavy and contains large quantities of alkali. The lands are unproductive and the reclamation of them has proved to be unprofitable.

These lands should be eliminated from the project and the operation of the canals serving them discontinued. This will save operation and maintenance expenses and prevent future losses by settlers who might purchase these lands. The resident settlers should be removed to more productive lands.

MILK RIVER PROJECT

Engineering.—Canals and laterals have been completed for the irrigation of 75,000 acres in the Malta and Glasgow divisions. When completely irrigated, some minor lateral extensions and drainage will be required. The water supply from the Milk River, which is an international stream, is supplemented by storage and diversion of the waters of the St. Mary's River. The completion of the additional pipe lines now under construction on this diversion canal will nearly double the available supply. A small regulating reservoir is needed on the Milk River near the land on account of the great distance the St. Mary's supply must be carried before reaching the project.

Nelson Reservoir, an inland site, supplied with water through the Dodson South Canal, provides an ample supply for the lands below this reservoir including those under the Vandalia Canal.

Supplemental water is also furnished under Warren Act contracts, to lands under old private canals in the Chinook division.

Agriculture.—Good land is cheap and water is available for the present needs on this project, but still a large part of the area is either not cultivated or is only producing native grasses. Good yields of alfalfa and alfalfa seeds, small grains, and hardy vegetables are obtained when properly cared for.

Financial and economic.—Although the Milk River project has been supplying water to irrigators for 14 years, the construction costs have never been fixed or any payments been made on that account. Water users on this project are being furnished water on a rental basis, which causes a large deficit annually. The cost of operating this project during the period 1920 to 1924 amounted to \$370,528 and only \$95,218 has been collected.

The slow agricultural development and small payments from settlers under this project have been matters of concern for the bureau for a number of years. As a basis for improvement, Congress in 1923 provided for a contract between the department and water users authorizing a reduction in payments and an extension of time for completing payments. This has not been approved by the Secretary of the Interior because there are no provisions to insure bringing about closer settlement and better farming. Without these, payments under any contract are not probable.

About 50,000 acres of the Malta and Glasgow divisions are unirrigated, 42,000 acres being dry farmed and producing crops valued at less than \$6 an acre. Out of 171 farms under irrigated cultivation on these divisions 92 are farmed by owners and 79 by tenants, or 46 per cent of tenancy. A considerable portion of the land is held in large tracts. Large areas are devoted to wild and tame grasses. Few of the present settlers have had experience in intensive farming.

Recommendations.—The difference between the cost of operating the Vandalia Canal and the revenue collected creates a condition

that should be ended. The settlers under this canal use scarcely any water. Unless water users will pay the field cost of operating this canal in advance or operate the canal themselves, operation of it in 1926 should be suspended.

The project needs from 100 to 200 carefully selected settlers and some means by which the tenants who are good farmers may be aided in becoming farm owners. A demonstration of the methods of intense culture with its more satisfactory financial returns is badly needed. Means should be provided to place new settlers in a compact area so that thorough cultivation would be the rule and bring about a change in the agriculture of this region. This would result in a larger and quicker return to the United States on its investment in the irrigation system.

SUN RIVER PROJECT

Engineering.—The canal and lateral systems for lands in the Fort Shaw division have been completed. Some drainage is needed. The water supply is ample.

Irrigation works and partial drainage have been provided for about 43,000 of the 100,000 acres in the Greenfields division.

Storage to supplement the normal flow of the Sun River, which is exhausted generally by July 15, is required. The construction of the Beaver Creek Reservoir, for which an appropriation of \$500,000 was made with certain conditions attached by the last Congress, is proposed. Classification of the land in this division is in progress.

Agriculture.—The project is well suited to livestock growing and dairying. Alfalfa, grain, and native hay are the leading crops. Experiments with sugar beets indicate that this crop may be added to those mentioned.

Financial and economic.—The Greenfields division of the Sun River project comprises all of the land on the north side of Sun River embraced in the original plan for this project. About 43,000 acres are now under constructed canals and 57,000 additional acres in this division and in the Mill Coulee and Sun River Slope divisions can be irrigated from the same main canal system, if additional water is provided. To provide an adequate water supply for the present irrigated area and permit its extension to the 57,000 acres, the construction of the Beaver Creek Reservoir was recommended and an initial appropriation of \$500,000 for its construction was made by the last Congress. This appropriation has attached to it the following condition:

Provided, That no part of the sum hereby appropriated shall be expended for the construction of new canals or for the extension of the present canal system for the irrigation of lands outside of the forty thousand acres for the irrigation of which a canal system is now provided, until a contract or contracts shall have been executed between the United States and the State of Montana, whereby the State shall assume the duty and responsibility of promoting the development and settlement of the project after completion, securing, selecting, and financing of settlers to enable the purchase of the required livestock, equipment and supplies, and the improvement of the lands to render them habitable and productive. The State shall provide the funds necessary for this purpose and shall conduct operations in a manner satisfactory to the Secretary of the Interior.

No part of the construction cost of the Greenfields division has been paid, and there has been a continued loss in operation. These conditions will change if more farmers and better farming are secured for the existing area. Grain growing by dry farming methods has

been too generally practiced. During the period 1920 to 1924, the operation and maintenance assessments on the Fort Shaw division amounted to \$71,221 and \$44,668 has been collected. On account of construction \$58,376 has been assessed and \$34,689 paid.

Although past experience has been discouraging, recent developments give hope of better results in the future. An encouraging beginning has been made in the improvement of farm practice. Small areas have been planted to sugar beets. Settlers are buying small flocks of sheep. The tendency to depend on rain and avoid irrigation is being slowly overcome. Some interest is being shown in the settlement of unoccupied or excess land holdings. These changes are hopeful, but are taking place too slowly to make of this a paying project in a reasonable time.

If the reservoir were built for the area now provided with distribution system only, settlers could not pay the cost of the storage. The reservoir can be made a financial success only by bringing additional lands under irrigation. Aid in settlement and farm development of this large additional area must be provided if this great outlay is to be repaid.

Recommendations.—Large areas, aggregating in many instances 300 acres or more, should be subdivided and sold to purchasers under a plan where attention would be given to the following: Land prices should be based on the production value of the land; terms of purchase should be long and interest rates moderate and a portion of many of these farms should be sown to alfalfa before the land is sold. This will appeal to skilled settlers of small means. About 250 settlers should be secured for the land now provided with a distribution system.

LOWER YELLOWSTONE PROJECT

Engineering.—The irrigation system of the Lower Yellowstone project is completed with the exception of a few minor structures. Drainage is needed and at least \$400,000 will have to be spent to provide it. One-half will be needed in the near future.

Agriculture.—This project has the natural advantages of good soil, abundant water supply, low elevation, and favorable climate, and is traversed by branches of two transcontinental railroads. Yields of sugar beets and other high-priced crops are large. Notwithstanding this, it is an economic and financial failure.

Financial and economic.—Water has been available since 1909, but settlers have been slow to use it. Only 14,025 acres were irrigated in 1924, which is less than in 1919 and is less than one-fourth of the total area of the project. Something must be done to increase the use of water for irrigation and make the revenue of the project sufficient to pay the cost of operating it.

The assessments for operation and maintenance have not been collected. Uncollected charges for five years, 1920 to 1924, amount to the huge total of \$238,528, only \$16,381 having been paid. Construction charges were assessed only recently, yet out of \$60,725 due, \$51,194 are unpaid. If irrigation were unprofitable on this project, there might be some excuse for this, but the average crop value in 1924 was \$39 an acre and the returns from sugar beets and other intensively cultivated crops compare favorably with many of

the older projects in the Rocky Mountain States. The project is drifting toward insolvency because land owners do not irrigate.

The high percentage of tenancy is a drawback. Out of 390 irrigated farms 155 are cultivated by tenants. The subdivision of large holdings into small irrigated farms, and the settlement of these must in some way be brought about. Local people wait for the Government to make additional concessions which, it is claimed, will stimulate settlement. It will not have this result unless they recognize more definitely than they do now their responsibility for the repayment of their debt to the Government. Aside from deferment of their delinquencies, farmers on this project will gain nothing by a change in the form of payment. As it is now, they are required to pay only 2 per cent on the cost of construction (\$45 an acre) which amounts to a yearly payment of 90 cents an acre. This is less than 5 per cent of what the average crop return will be when the land is properly farmed.

Recommendations.—Operating this project at Government expense should cease. Charges for this should be collected in advance. Large expenditures for drainage should not be made until more farmers and better cultivation are assured. Delinquent excess holdings or unoccupied farms should be acquired by some authority and when acquired should be subdivided and sold to qualified settlers on long terms with a low rate of interest. The improving of these farms and the settlement of them should be entrusted to an officer skilled in this work. He should also assist others not delinquent to dispose of their unoccupied farms or excess holdings.

NORTH PLATTE PROJECT

Engineering.—Irrigation works for the north side lands are completed. Those on the south side lands will soon be completed. Drainage for south side lands is being provided as needed; for north side lands, available funds are exhausted and numerous small areas still remain which can not be utilized without drainage. In general, however, their reclamation will not be warranted by reason of high per acre cost. The Guernsey Reservoir, which will supplement the water supply by additional storage capacity and closer river regulation and provide additional power to the project, is under construction.

Agriculture.—The soils of this project are productive excepting a considerable area of light sandy land on the north side and areas of heavy gumbo land on the south side. The main crops are alfalfa, small grains, sugar beets, and corn. There are four sugar-beet factories on the project.

Financial and economic.—Arrears of payment are so large on this project, exclusive of the Fort Laramie division on the south side, as to be a menace to its solvency. The amounts owing for operation and maintenance assessments for 1920 to 1924 are \$594,189 and for construction charges for the same period \$1,262,333, or a total of \$1,856,522, which is the largest of any project. This is due partly to the struggles of the water users to pay off their private debts, which have grown out of land purchases at speculative prices, expansion of operations during prosperous times and borrowings to improve and equip farms. Many farmers lost their units through mortgage foreclosures. Sixty-one per cent of the farms on this

project are farmed by tenants. Tenancy should be checked by land-owners selling their lands at moderate prices on reasonable terms and surrounding the undertaking by the use of long time and intermediate credit suited to the needs of experienced settlers with small capital. This will be hastened if the Government insists on the payment of its charges. Relief and the funding of accrued delinquencies into the construction charge are too often capitalized by speculators, resulting in no benefit to the actual settler who purchases the land.

Recommendations.—Operation and maintenance charges should be paid each year by all individual farmers who receive water. Mortgages should be refunded on terms and conditions that farmers can pay. A coordinated plan should be put into effect to sell the surplus holdings, the unoccupied farms or those farmed by tenants to bona fide settlers.

NEWLANDS PROJECT

Engineering.—The Newlands project obtains its water supply from the Truckee and Carson Rivers. A reservoir has been built on the Carson River to store water from that river and flood water carried from the Truckee by means of the Truckee Canal, for irrigation of lands in the Carson Valley. In the original plans of the project Lake Tahoe was to serve as the regulator for the Truckee lands. This plan has been interfered with by vested rights and power developments which restrict the amount of water which can be stored in the nonirrigating season. Both the Truckee and Carson Rivers are interstate streams and the conflict of irrigation and power rights has led to continuous water-right litigation since the inception of this project. The lands in the Carson division have an ample water supply. Lands in the Truckee division, of which about 5,000 acres are in cultivation, have an inadequate supply some years. The water rights on the Truckee River are being adjudicated and it is hoped that the final decree will improve this situation. These lands can secure supplemental water from the proposed Spanish Springs Reservoir if constructed. A soil survey and land classification now being made will show the land that should be irrigated under the original scheme. This will enable the amount of surplus water available for the Spanish Springs division to be determined.

Agriculture.—The principal crop grown is alfalfa. There are unusually favorable opportunities on this project for stock raising and dairying. Dairying is on the increase. A sugar factory was erected on the project, but is idle because not enough farmers are willing to grow beets to make it a success.

Financial and economic.—The irregular surface of much of this project required a large expenditure to prepare the land for irrigation. Many of the original settlers did not have money to do this and the development of their farms was consequently delayed. In other cases settlers gave up because they were unable to continue. Alkali developed soon after water was turned on and farm incomes were reduced. Notwithstanding these drawbacks the settlers have paid in the period, 1920 to 1924, 78 per cent of their construction and 79 per cent of their operation and maintenance assessments.

Recommendations.—The irrigable area of this project should be accurately determined in order that the water of both the Truckee

and Carson Rivers may be fully utilized on the most productive areas served by them.

Many large land holdings under old vested water rights should be subdivided and disposed of to settlers.

Quarantine regulations against the alfalfa weevil prevent the shipment of alfalfa hay into or through California to market. This causes low returns for hay except when fed to stock on the project. More credit suited to the needs of livestock and dairy farming is required to increase these industries. Better freight rates for feeding livestock in transit should be secured. Farmers should be induced to improve their farm facilities for feeding and caring for livestock. Better facilities should be provided for weeding out unprofitable dairy cows, and an intensive campaign for improving the dairy herds should be started.

CARLSBAD PROJECT

Engineering.—The reduced capacity of the McMillan Reservoir due to silt conditions and excessive losses by leakage requires the construction of additional storage. Investigations are in progress to determine the most feasible location for another reservoir. It may also be found necessary to line some of the canals to reduce losses in distribution. This would lessen the requirements for storage and drainage which is needed on scattered tracts throughout the project.

Agriculture.—The climatic and soil conditions of this project permit a wide range of crop production. The two leading crops are cotton and alfalfa. Hardy fruits do well.

Financial and economic.—An excellent record in repayments has been made by the Carlsbad project. Charges on construction and operation and maintenance assessed during the 5-year period, 1920 to 1924, amounted to \$554,477.26, of which \$529,369.84 was paid, leaving unpaid only \$25,107.42. The remoteness of this project from large markets makes it necessary to have cooperative arrangements for shipping and marketing crops and products. At present cotton is the most profitable crop. To maintain the fertility of the soil and obtain satisfactory yields, a large area of land must be kept in alfalfa. To cultivate the land of this project in such a way as to secure the best results, at least 200 additional settlers are needed.

Recommendations.—Additional water storage capacity should be provided to replace the depleted storage in the McMillan Reservoir.

The large holdings should be subdivided and more farms cultivated by owners.

RIO GRANDE PROJECT

Engineering.—The main features of the irrigation and drainage systems as planned for the Rio Grande project have been completed. One of the problems which confront the water users and land owners on the project, particularly in the district below El Paso, is that of flood protection.

The Rio Grande, which is used as the main carriage canal from Elephant Butte storage dam throughout the project, has, owing to the absence of large destructive floods, elevated its channel in the El Paso Valley where it is the international boundary line, and the valley lands and irrigation and drainage works are menaced annually by flood discharge from the drainage area below the storage dam. Complete rectification and control will undoubtedly require a treaty

between the two countries. In the mean time, the city and county governments of El Paso are providing limited protection measures, and most likely additional project funds will be required to effect reasonable protection to project works and lands, pending negotiation and solution of the international problem.

Agriculture.—The abounding prosperity of the Rio Grande project in recent years has been due largely to the production of cotton. Alfalfa is next to cotton in acreage. Melons, pears, grapes, small fruits, and vegetables are extensively grown for local and eastern markets.

Financial and economic.—All charges on this project have been promptly paid. The water users' financial relations with the Government have been businesslike and highly satisfactory.

The settlers on this project are well organized and this fact has permitted teamwork in solving their problems and has enabled them to market their products to better advantage.

Recommendations.—As a general rule, tenancy flourishes with cotton growing and this project is no exception to this. Twenty-five per cent of the farms on this project are occupied by tenants. The water users and civic organizations have been active in securing settlers. This work should continue until the farms are occupied by resident owners.

UMATILLA PROJECT

Engineering.—The Eastern division requires additional lateral lining to prevent excessive seepage losses. Other improvements to the distribution system are needed to facilitate the delivery of water. The cost of this work must be charged to construction because it is too expensive to be carried on as operation and maintenance.

Agriculture.—The project has to a large extent been devoted to alfalfa production, much of which has been shipped out baled or as alfalfa meal. More livestock should be kept on farms to consume the alfalfa produced and generally to build up the soil, which is extremely sandy.

Financial and economic.—The Government has advanced \$590,359 for operation and maintenance, of which \$314,621 has been repaid and \$190,628 funded with the construction account leaving \$85,110 which is unpaid. The amount due and unpaid on the construction charges is \$177,546. An area in excess of 4,000 acres is so sandy as to make irrigation farming on it unprofitable. Less than 10 per cent of this area was cultivated during the past irrigation season.

Recommendations.—Approximately 4,000 acres of poor land should be eliminated from the project to avoid operating long laterals for unproductive areas.* It will also save water by preventing its unproductive use, and put an end to the trafficking and speculating in these lands.

KLAMATH PROJECT

Engineering.—The irrigation and drainage works necessary for the lands in the main division have been completed, and of the unwatered area in the bed of Tule Lake irrigation and drainage works have been provided for 8,000 acres. Several tracts above the main canal which can be irrigated by low pumping lifts have been organized into irrigation districts and are constructing their own

pumping and distribution systems. Water for these lands is furnished from the project supply. Power is available at a low cost.

Storage for irrigation of the lands in the Langell Valley has been provided in the Clear Lake and Gerber Reservoirs. These reservoirs also retain the flood waters of Lost River which has resulted in drying up Tule Lake and making the large area in the bed of this lake available for farming.

Canals and laterals for the irrigation of the lands in the Langell Valley are being constructed under irrigation district contracts.

A large part of the land unwatered in the bed of Tule Lake still requires distribution and drainage works. These should be provided as soon as the demand is sufficient.

The water supply is ample for all lands in the project.

The lands in Lower Klamath Lake have been unwatered and the part of the bed of this old lake located in Oregon is being developed by the Klamath drainage district. The disposition of the 30,000 acres of this lake bed in California is a problem which awaits action. There is danger of the dry peat land catching fire. If reflooded this danger would be removed, but this is opposed by the Klamath drainage district. A board of experts is to make a study of the problem, report whether the land is suitable for cultivation, and recommend what should be done with it.

Agriculture.—Satisfactory yields of alfalfa, tame and wild irrigated pastures and small grains, adjacent forest reserves for summer pastures, plentiful stock water, freedom from livestock diseases, and cheap lumber for barns and stock sheds make this project unusually suited to stock and dairy farming. The growing season is short but the days of summer are long and warm and growth is rapid.

Financial and economic.—The Klamath project has made a fine financial showing in the payment of its debt to the United States. Eighty-eight per cent of operation and maintenance and nearly 99 per cent of accrued construction assessments have been paid. However, this condition was largely brought about by a credit to the district of \$30,000 on account of an adjustment of the matter of carrying water to the Van Brimmer ditch and the yearly additions made to the assessment rolls amounting to 10 per cent to cover probable delinquencies. The fact is that a considerable number of water users are delinquent to the district for their irrigation taxes. Four large holdings comprising 1,370 acres are delinquent in their State, county, and irrigation taxes, including penalties, for a total of \$28,884. If this sum and other delinquencies of lesser amounts were collected and the portion of these representing irrigation taxes turned over to the district it would be in a very solvent condition. The enforcing of the district's tax liens in such cases will accomplish this result.

Recommendations.—Plans for the settlement of 8,000 acres of the Tule Lake division have been deferred owing to a protest by the water users on the settled part of it over the construction charge. It has been fixed at \$90 an acre, which is the amount needed to repay construction costs based on present allocation of costs to the 24,200 acres in this division. It is proposed to open to settlement 8,000 acres for which construction has been completed. Further construction on this area is to be suspended until the land is occupied and the construction cost controversy is decided.

BELLE FOURCHE PROJECT

Engineering.—The project needs drainage. To provide this will cost not less than \$1,000,000. This expenditure should await measures for agricultural development and settlement.

Agriculture.—The soil of the project is very productive of temperate zone crops and it has an ample water supply; the construction and operation charges are low.

Financial and economic.—From its inception to the present the Belle Fourche project has been operated largely at public expense. The total expenditures for operation and maintenance have been \$1,109,625 and the total repayments \$492,719. In the 17 years of operation the project has cost the Government \$616,906. The construction cost amounts to \$3,547,570, of which but \$472,025 has been returned.

Only 31 per cent of this project is farmed by resident owners; the remaining lands are either farmed by tenants or are abandoned. Adjacent to the town of Newell, S. Dak., there now are 76 abandoned farms. There are 10 more occupied by tenants. The indebtedness of 39 of these farms was analyzed. Not only are the Government water charges delinquent but the State and county taxes are unpaid. The tax indebtedness will soon be more than the land is worth. The following table shows the State, county, and irrigation taxes that have accumulated on the 39 farms in the last 6 years.

Tax accumulation on specified farms

Tract No.	Acreage		General taxes							Irrigation district assessments			Total	Grand total
	Total	Irrigable	1919	1920	1921	1922	1923	1924	Total	1923	1924	1925		
1	160	69				\$74.09	\$161.10	\$148.97	\$384.16	\$4.83	\$146.73	\$146.73	\$298.29	\$682.45
2	160	76				159.44	33.22	180.85	373.51	98.67	328.47	286.42	713.56	1,087.07
5	80	63		\$201.39	\$127.02	162.05	161.10	148.07	799.63	171.48	300.03	226.98	698.49	1,488.12
6	80	78						151.78	151.78	266.70	422.70	404.70	1,094.10	1,245.88
9	40	40						77.42	77.42		28.07	83.87	111.94	189.36
10	40	40						74.32	74.32		27.60	82.80	110.40	184.72
11	80	70			137.66	180.40	194.04	161.65	673.75	13.60	114.80	174.60	303.00	976.75
14	80	60		147.90	125.69	125.36	139.51	128.91	667.41	205.12	339.22	311.32	855.66	1,523.07
15	80	64			128.51	135.09	147.81	137.50	548.91	178.84	306.84	233.24	718.92	1,267.83
16	80	80			146.51	148.18	177.71	163.84	636.24	220.57	406.70	302.07	928.81	1,565.05
17	80	62								173.22	299.52	227.92	700.66	700.66
19	80	70			154.01	137.52	165.05	144.93	601.51	187.96	330.56	313.86	832.38	1,433.89
20	80	57						124.82	124.82	153.10	267.10	203.50	623.70	748.52
21	80	74					165.95	164.50	330.45	92.43	288.03	264.63	645.09	975.54
23	80	80					166.08	154.84	320.92	114.25	345.00	311.75	771.00	1,091.92
25	80	79			158.07	166.92	171.06	203.88	699.93	222.28	402.98	302.78	928.04	1,627.97
26	80	63						122.05	122.05	207.86	333.86	261.36	803.08	925.13
28	80	71									333.69	251.99	585.68	585.68
29	80	50		115.97	121.64	112.26	139.51	127.92	617.30	135.65	235.65	178.15	549.45	1,166.75
30	80	74						83.92	83.92	241.31	389.34	304.24	934.92	1,018.84
31	80	65						70.01	70.01		.87	171.27	172.14	242.15
32	160	33			113.38	127.30	127.88	117.84	486.40	89.93	155.93	148.28	394.14	880.54
33	80	49						106.41	106.41		170.41	114.01	284.42	390.83
34	80	65		126.44	130.00	116.00	128.71	131.39	632.54	213.80	343.80	268.95	826.55	1,459.09
35	120	73						147.08	147.08	240.01	386.01	369.31	995.33	1,142.41
37	80	44		98.56	108.00	99.54	117.92	108.39	532.41	4.36	105.56	146.06	255.98	788.39
38	80	15	\$21.93	58.82	53.53	62.39	58.13	54.21	299.01	2.91	26.51	33.96	63.38	362.39
39	80	75						83.34	83.34		185.65	254.65	440.30	523.64
40	80	76		152.01	148.46	143.69	175.18	147.36	766.70	259.82	411.82	323.27	994.91	1,761.61
41	160	128		204.55	254.70	247.75	284.83	265.17	1,257.00	360.80	623.83	526.28	1,510.99	2,767.99
42	40	37						36.40	36.40		106.78	165.88	272.66	309.06
43	80	72						99.08	99.08		71.36	315.61	386.97	486.05
44	80	61	85.64	120.70	157.81	119.56	139.92	130.60	754.23	207.79	347.94	268.79	824.52	1,578.75
45	160	93						271.00	271.00	144.01	434.61	428.61	1,007.23	1,278.23
46	40	39						34.40	34.40		88.52	93.02	181.54	215.94
47	160	134	141.34	189.21	269.50	269.42	316.36	280.61	1,546.74	443.36	680.56	611.16	1,735.08	3,281.82
48	80	72						71.70	71.70	.66	1.32	50.82	52.80	124.50
49	80	34						62.72	62.72		75.60	81.10	156.70	219.42
50	80	71					171.06	202.65	373.71	191.69	336.29	317.29	845.27	1,218.98
2,556									14,918.91				24,608.08	39,526.99

1 1918, \$80.30.

The maximum tax delinquency amounts to \$26 per irrigable acre and the average is \$15.47 an acre. Tax certificates have been offered by the county with no buyers. There is nothing in this situation that justifies spending \$1,000,000 for drainage. Unless more and better farmers can be secured, the operation of this project in the future will be as unprofitable as in the past.

Recommendations.—Two courses are open to the Government. One is to dispose of the project, as has been done at Williston. The other is to enter into a constructive program of agricultural development and settlement to save the Government's investment and make it a solvent undertaking. The latter course is advocated for the following reasons: Such important economic factors as ample water supply at low cost, good soil, and favorable climate should make it a successful project. What is required are more good resident owners who will till their own farms, keep livestock, and grow sugar beets and other crops of high acreage value. This can be accomplished by the Government instituting suits to collect arrears and buying the land if owners do not pay; then disposing of the farms to actual cultivators under terms and conditions that settlers can meet.

STRAWBERRY VALLEY PROJECT

Engineering.—The irrigation works are completed, but some drainage is needed to prevent loss threatened by rising ground water. The water supply is ample and there have been no shortages.

Agriculture.—The agriculture of the project is diversified as it has a wide range of crops and is served with beet sugar factories, canneries, and other industries. High-priced crops, especially vegetables for canning purposes, are being more extensively grown each year.

Financial and economic.—The record of payments for water is unsatisfactory. During the five-year period, 1920 to 1924, of the \$591,162 construction charges assessed, over 35 per cent is unpaid, and of the \$260,275 operation and maintenance assessments, \$52,735 is delinquent. Nearly all the settlers could meet their charges. The persistent delinquents are hoping to have their arrears covered into construction. The land is well cultivated; 47,560 acres were irrigated out of 53,890 acres for which water was available in 1924.

Recommendations.—An organization to assume operation and maintenance of the reservoir tunnel, and power plant is under consideration. A contract is being prepared to accomplish this. Prices and yields of products in 1924 were good and promise to be still better in 1925, which leads to the belief that the water users on this project will cooperate and help carry into effect plans now being made for the complete payment of all project assessments in 1925.

OKANOGAN PROJECT

Engineering.—For several years the project has been extremely short of water. The project water supply has been supplemented by pumping from wells, small ponds in the vicinity, and also from the substorage in Salmon Lake Reservoir. Water is also being rented or purchased by the water users from vested right owners at high prices. They have exhausted all simple means of providing additional water, expending in 1924 as much as \$30 an acre foot in addition to the cost of the Government water, which alone amounted

to \$11.30 an acre. The prospects for providing such added water supply are not promising, although all possible sources are being investigated.

Agriculture.—This is an apple growing district. With ample water and good cultural methods from 500 to 1,000 boxes of marketable apples per acre have been produced. Because of the excellent quality of the fruit, which is marketed in the Eastern States, the prices obtained are high.

Financial and economic.—There has been expended for operation and maintenance \$409,000, of which \$271,000 has been repaid, \$10,000 funded with construction, and \$49,000 is due and unpaid. The remainder is current charges not yet due. There are \$17,000 of due construction charges which are unpaid. The fixed charges are among the highest of the projects but are not a serious burden when good crops are obtained, which is largely dependent on an ample supply of water.

Recommendations.—Investigations of every available source of supply should be continued to supplement the water supply of this project.

YAKIMA PROJECT

Engineering.—This project is completed as planned for the Tieton and Sunnyside divisions. Some excess storage is available for new divisions, of which there are four.

Agriculture.—The soil and favoring climate make this one of the most productive projects in the United States. Large yields of alfalfa, small grains, fruits, and vegetables are obtained. The Tieton and Sunnyside divisions are noted chiefly for their excellent orchards. The average crop value on the Sunnyside division in 1924 was \$63 an acre; on the Tieton division it was \$130. It is expected that these returns will be exceeded in 1925.

Financial and economic.—The Yakima project is a solvent enterprise, and conditions of development are such as to enable prompt payment of charges. More than 85 per cent of the charges due, during the five-year period 1920 to 1924, have been paid. Foreclosures by loan agencies and purchases by nonresidents have resulted in considerable tenancy. Out of 4,691 farms, 1,554 are cultivated by tenants. Farms so cultivated are not, as a rule, maintained like those cultivated by owners; attention is not given to soil fertility and crop returns are diminished.

Recommendations.—An effort should be made to convert some of these tenants into farm owners, and additional settlers should be secured. This can best be accomplished by selling these lands on their productive value and giving to the purchasers long-term payments. The railroads, civic organizations, landowners and the bureau should cooperate in this.

RIVERTON PROJECT

Engineering.—The Riverton project has been planned to irrigate 100,000 acres. The main canal and laterals to supply water to 15,000 acres, of which about one-third is public land, will be completed for the larger part of this area by the spring of 1926. A power plant and 28-mile transmission line supply power for construction and project uses. The Pilot Butte Reservoir, providing 30,000 acre-feet

storage capacity, is nearing completion. Further construction will be postponed until such part of this 15,000 acres has been settled and brought under cultivation as will give assurance that when water is provided for additional land it will be in demand.

Agriculture.—As this project is located in an undeveloped region, some experimentation with crops to test those best suited to the soil and climate may be necessary. State agencies will be asked to assist in this. Near the town of Riverton alfalfa, sugar beets, grain, and potatoes are grown successfully under irrigation.

Financial and economic.—The settlers on the first unit will be remote from railways and markets and will have to pay special attention to products that will stand shipment long distances, such as butter, cheese, eggs, livestock, and honey. They will need cooperative and social organizations. It is planned therefore to concentrate on the agricultural development of this project during the next 12 months.

Recommendations.—Water will be offered to the owners of private lands and settlers on public land on liberal terms, under a three-year rental contract, with no charges for construction, and with a probability that water rentals will not meet operating expenses. Settlers on the public land will be selected under the provisions of subsection C of the act of December 5, 1924. Everything will be done to give these new settlers the benefit of local information and practical experience in the improvement of their farms and in working out a crop program. The State authorities, especially the extension department of the State university, will be asked to cooperate and assist in this.

SHOSHONE PROJECT

Engineering.—The Shoshone project includes five divisions. Only two, Garland and Frannie, have been completed and settled. Storage capacity for the other three has been provided and on one of these, the Willwood division, the distribution system has been constructed, but none of the land is settled. Additional drainage is needed on the Garland and Frannie divisions. Drainage will also be needed on the Willwood division, when it is irrigated.

Agriculture.—The principal crops of the project are alfalfa, sugar beets, potatoes, and small grains.

Financial and economic.—The financial situation on this project is serious. Only 43 per cent of the operation and maintenance charges for the five-year period, 1920 to 1924, have been paid and the arrears now amount to \$205,248. Only 32 per cent of the construction charges for the same period have been paid, the uncollected portion amounting to \$335,232. The early settlers lacked capital to improve and equip their farms and payment of private debts has interfered with payments to the Government. The rapid rise in delinquencies in the past five years shows that unless this is checked and yearly payment of operating expenses is secured, the project will become so burdened with arrears that recovery will be impossible. The agricultural results on the Garland division of this project have been satisfactory, the average crop return being about \$21 an acre, which will increase with the better preparation of land and more thorough cultivation, but on the Frannie division serious seepage

developed, and it is found that much of the soil is unfit for irrigated culture, and more than half of the farms have been abandoned. On both divisions farming operations have been interfered with by the rapid rise of ground water and the prevalence of alkali.

Recommendations.—The annual operation and maintenance expenses should be collected. When not collected, it is a forced loan. Satisfactory credit is needed on this project but it should not be provided out of the operation and maintenance allotment. The present private debts should be refunded providing more liberal terms of repayment. Some progress has already been made to that end. A competent economic advisor is needed on this project. This will help bring about better farming and more livestock on farms. His duties would include placing settlers on the land and giving them practical advice afterwards. New settlers should be selected in accordance with their farming experience, capital, and other desirable characteristics.

The situation on the Willwood division shows the need of giving special attention to settlement. About 10,000 acres of this division are admirably suited to irrigated agriculture, but there are no applicants for farms. An economic report states that it will require \$6,000 to \$7,500 to change 80 acres of raw land into a farm. Thus far no provision for giving either practical advice or financial aid has been made.

OPERATIONS DURING THE FISCAL YEAR

During the season of 1924 the Bureau of Reclamation continued the operation and maintenance of the irrigation systems on the projects except the Salt River project in Arizona and the gravity division of the Minidoka project in Idaho. These have been taken over and are being operated by the water users. On the Strawberry Valley project in Utah, the bureau operates and maintains only the reservoir, main canal, and power plant, the distribution system being handled by the water users.

Out of the total irrigable area of 1,805,730 acres, 1,290,890 acres were irrigated, and 1,216,610 acres cropped. The gross value of crops produced on project lands was \$66,488,560, or \$54.65 an acre. Additional lands served through Government works with a full or partial water supply under Warren Act contracts amounted to 1,237,835 acres, of which 889,460 acres produced crops with a gross value of \$43,237,470, or \$49.28 an acre. The total value of crops grown under Federal irrigation works was therefore nearly \$110,000,000.

Owing to the extreme drought in the Pacific Coast States, the Okanogan and Orland projects had only about one-third of the normal water supply. Crop losses for the season were considerable. Further losses will result through damage to trees which will be reflected in 1925 crops. On the Newlands project the lands dependent on Truckee River water suffered a serious water shortage which was partially relieved by pumping from Lahonton and Lake Tahoe. Otherwise an ample water supply was available. Many of the storage reservoirs constructed by the bureau more than paid for themselves in this one season by insuring full crops on projects where otherwise very little crop production would have been possible.

ORLAND PROJECT, CALIFORNIA

21534

AVERAGE ALTITUDE
250 FEET
TEMPERATURE RANGE
-21° TO +114° F

AVERAGE GROWING SEASON
267 DAYS
AVERAGE ANNUAL PRECIPITATION
17.8 INCHES

CROPS 1924

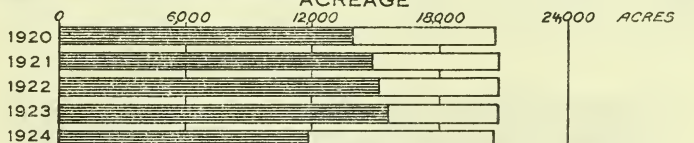
ITEM	ACREAGE CROPPED	VALUE OF CROP	VALUE PER ACRE
CEREALS AND OTHER GRAINS	449	\$9,855	\$19.95
HAY AND FORAGE	7,504	144,260	19.22
VEGETABLES AND FRUIT	5	1,060	212.00
FRUIT AND NUTS	2,429	69,775	28.73
TOTAL	10,387		
DUPLICATED LAND ACREAGE*	417		
LAND ACREAGE CROPPED	9,970	\$224,950	\$22.56

* ON 417 ACRES TWO OR MORE CROPS WERE GROWN DURING THIS CROP SEASON

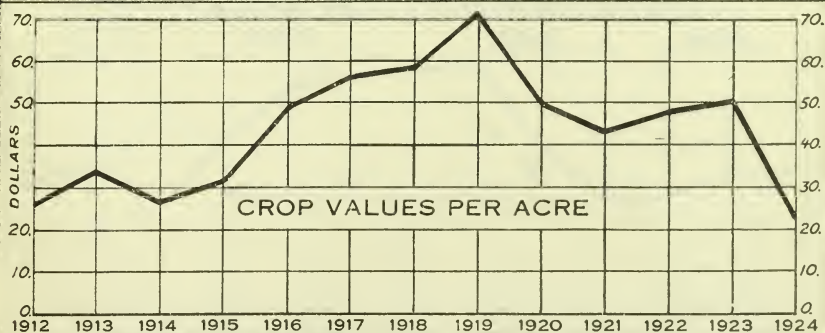
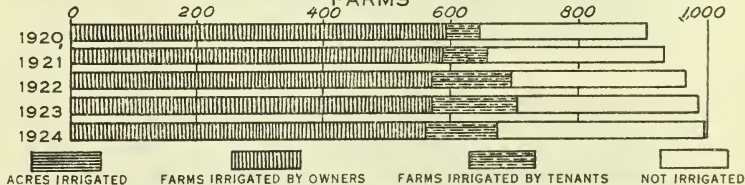
POPULATION

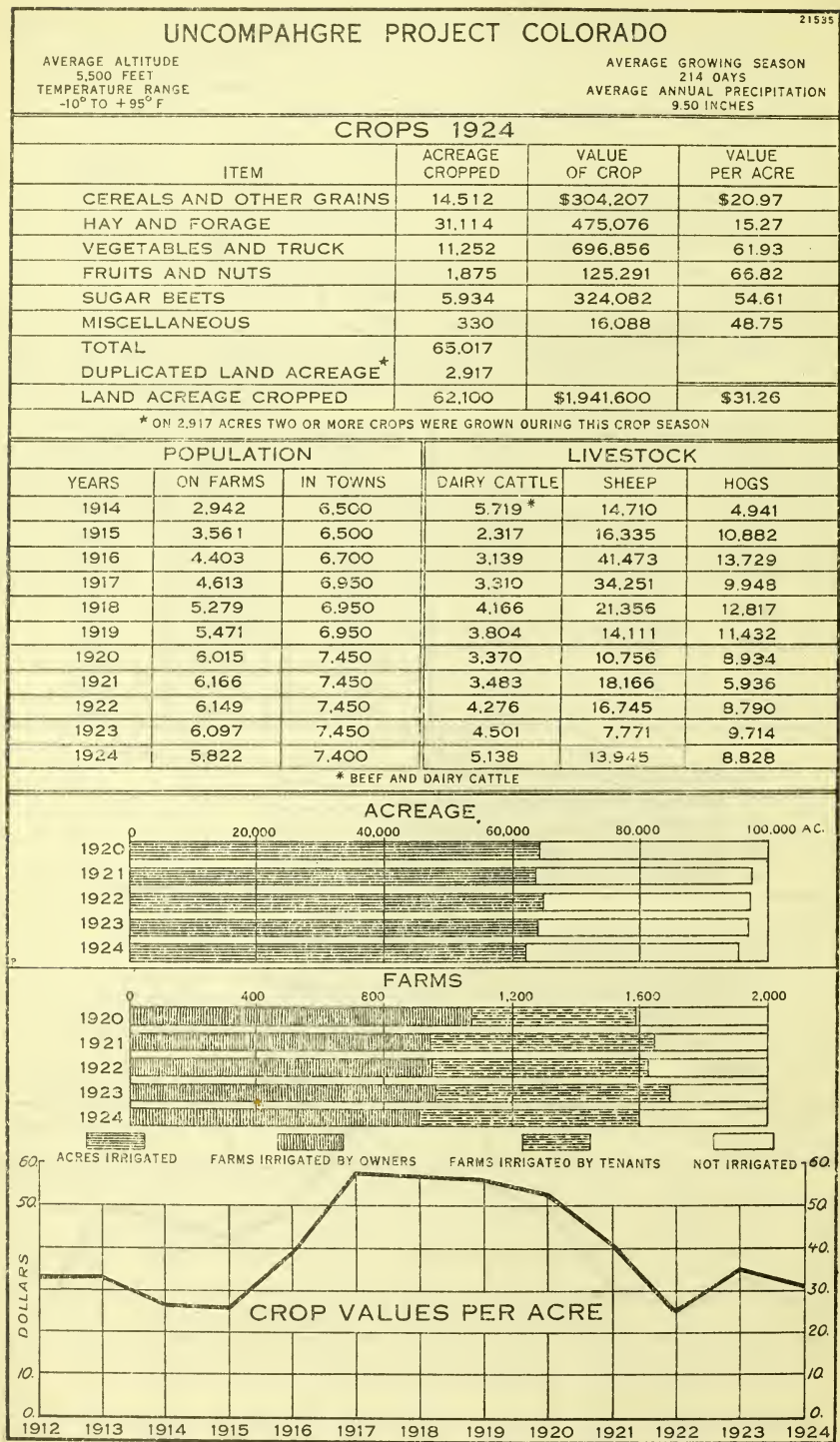
YEAR	ON FARMS	IN TOWNS	DAIRY CATTLE	SHEEP	HOGS
1914	1,100	1,350	2,549	565	2,400
1915	1,600	1,500	3,257	505	4,047
1916	1,700	1,550	3,447	634	2,865
1917	1,900	1,550	2,914	762	2,665
1918	2,000	1,600	2,586	3,335	3,163
1919	2,250	1,700	2,589	1,650	4,644
1920	2,200	1,700	2,014	1,848	2,973
1921	2,250	1,700	2,368	1,663	1,417
1922	2,275	1,700	2,655	1,349	2,151
1923	2,300	1,700	2,991	1,840	2,511
1924	2,100	1,700	2,466	687	1,843

ACREAGE



FARMS





RIO GRANDE PROJECT, N. MEX.-TEXAS

21936

AVERAGE ALTITUDE
3,700 FEET
TEMPERATURE RANGE
-5 TO +105°F

AVERAGE GROWING SEASON
255 DAYS
AVERAGE ANNUAL PRECIPITATION
10 INCHES

CROPS 1924

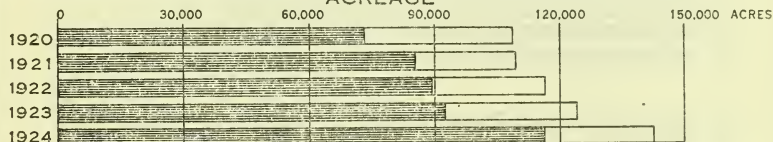
ITEM	ACREAGE CROPPED	VALUE OF CROP	VALUE PER ACRE
CEREALS AND OTHER GRAINS	4,153	\$140,254	\$33.77
HAY AND FORAGE	33,743	1,817,915	54.00
VEGETABLES AND TRUCK	4,833	473,936	98.00
FRUITS AND NUTS	1,777	160,045	146.34
COTTON	58,721	7,010,952	119.40
MISCELLANEOUS	129	21,468	116.42
TOTAL	103,356		
DUPLICATED LAND ACREAGE*	236		
LAND ACREAGE CROPPED	103,120	\$9,624,570	\$93.33

* ON 236 ACRES TWO OR MORE CROPS WERE GROWN DURING THIS CROP SEASON

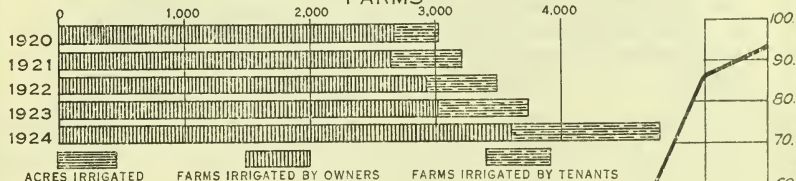
POPULATION			LIVESTOCK		
YEAR	ON FARMS	IN TOWNS	CATTLE	SHEEP*	HOGS
1914	6,642	78,135	1,740	103	4,189
1915	10,000	80,000	2,459	1,286	6,096
1916	10,431	86,331	3,813	7,000	8,324
1917	10,500	86,500	3,815	6,805	7,677
1918	10,600	86,950	4,198	4,476	15,560
1919	12,890	89,316	5,347	5,287	9,225
1920	12,199	95,083	4,857	2,865	10,123
1921	11,774	101,235	6,832	5,073	6,307
1922	11,267	110,442	8,435	3,940	6,532
1923	15,925	111,883	7,733	3,379	4,573
1924	28,000	106,000	7,337	1,418	1,510

* INCLUDES GOATS

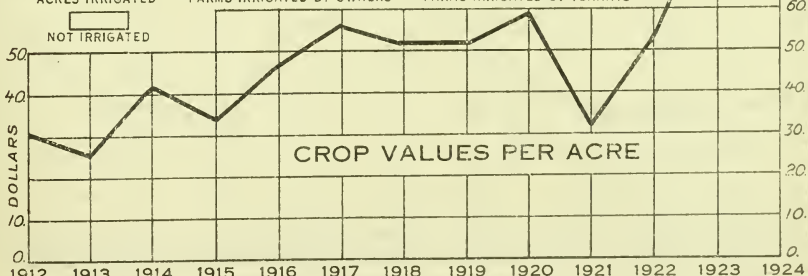
ACREAGE



FARMS



ACRES IRRIGATED FARMS IRRIGATED BY OWNERS FARMS IRRIGATED BY TENANTS



CROP VALUES PER ACRE

KLAMATH PROJECT, OREG.-CALIF.

21537

AVERAGE ALTITUDE
4,100 FEET
TEMPERATURE RANGE
-10° TO +100° F

AVERAGE GROWING SEASON
153 DAYS
AVERAGE ANNUAL PRECIPITATION
12.8 INCHES

CROPS 1924

ITEM	ACREAGE CROPPED	VALUE OF CROP	VALUE PER ACRE
CEREALS AND OTHER GRAINS	3,040	\$61,475	\$20.22
HAY AND FORAGE	28,657	670,181	23.40
VEGETABLES AND TRUCK	581	49,764	85.65
FRUIT AND NUTS	2	400	200.00
MISCELLANEOUS	430	10,750	25.00
TOTAL	32,710	\$792,570	24.23

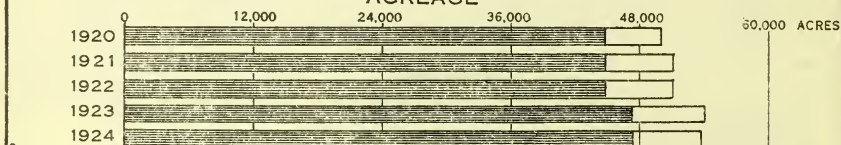
POPULATION

YEAR	ON FARMS	IN TOWNS
1914	1,375	4,500
1915	1,520	4,700
1916	1,580	5,000
1917	1,610	5,700
1918	1,800	5,000
1919	2,000	5,300
1920	2,050	5,500
1921	2,200	5,800
1922	2,200	6,200
1923	2,600	7,000
1924	2,600	7,000

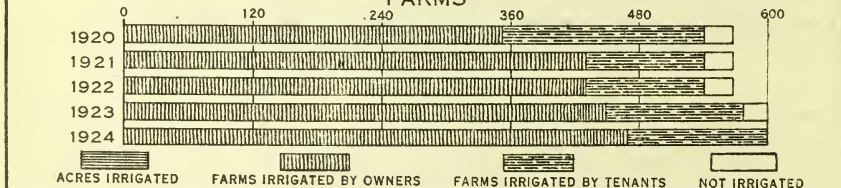
LIVESTOCK

CATTLE	SHEEP	HOGS
4,660	361	6,542
4,171	1,413	7,546
5,583	3,879	3,681
3,000	8,147	3,423
3,082	10,861	3,522
2,779	23,763	2,762
6,503	29,006	2,720
6,328	10,442	1,818
3,400	8,000	2,242
3,403	15,026	2,826
5,846	20,600	1,986

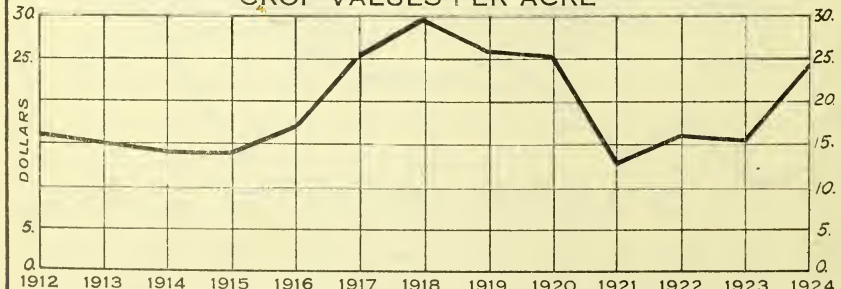
ACREAGE



FARMS



CROP VALUES PER ACRE



BELLE FOURCHE PROJECT, S. DAKOTA

21538

AVERAGE ALTITUDE
2,800 FEET
TEMPERATURE RANGE
-38° TO +105° F

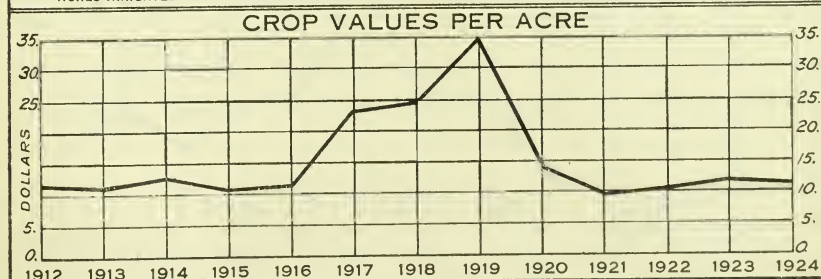
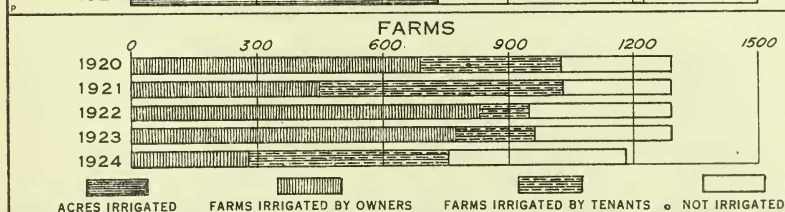
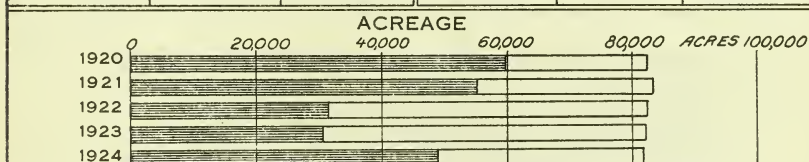
AVERAGE GROWING SEASON
130 DAYS
AVERAGE ANNUAL PRECIPITATION
15 INCHES

CROPS 1924

ITEM	ACREAGE CROPPED	VALUE OF CROP	VALUE PER ACRE
CEREALS AND OTHER GRAINS	14,353	\$202,097	\$14.08
HAY AND FORAGE	34,581	293,767	8.50
VEGETABLES AND TRUCK	224	13,824	61.71
SUGAR BEETS	1,281	86,249	67.33
MISCELLANEOUS	71	1,153	16.24
TOTAL	50,510		
DUPLICATED LAND ACREAGE*	700		
LAND ACREAGE CROPPED	49,810	\$597,090	\$11.98

* ON 700 ACRES TWO OR MORE CROPS WERE GROWN DURING THIS CROP SEASON

POPULATION			LIVESTOCK		
YEAR	ON FARMS	IN TOWNS	DAIRY CATTLE	SHEEP	HOGS
1914	2,360	2,050	1,578	25,740	11,988
1915	2,375	2,050	2,200	26,210	14,798
1916	2,375	1,775	2,870	32,152	13,631
1917	2,400	1,845	2,912	36,459	10,946
1918	2,400	1,775	3,330	35,607	9,007
1919	2,675	2,200	2,421	75,398	19,837
1920	2,700	2,350	2,969	34,781	11,037
1921	2,700	2,386	3,870	48,510	13,260
1922	2,700	2,386	3,778	40,039	12,792
1923	2,500	2,350	4,138	55,233	16,064
1924	2,020	2,350	4,509	45,350	7,979



YAKIMA PROJECT WASHINGTON

21539

AVERAGE ALTITUDE
SUNNYSIDE DIV. 700 FEET
TIETON DIV. 2100 FEET
TEMPERATURE RANGE -28° TO +104°F

AVERAGE GROWING SEASON
SUNNYSIDE 214 DAYS. TIETON 164 DAYS.
AVERAGE ANNUAL PRECIPITATION
6-8 INCHES

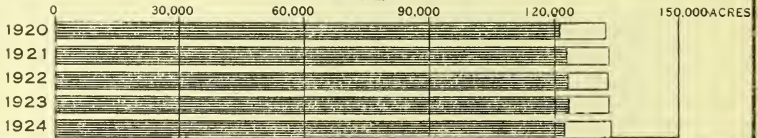
CROPS 1924

ITEM	ACREAGE CROPPED	VALUE OF CROP	VALUE PER ACRE
CEREALS AND OTHER GRAINS	13,405	\$445,931	\$33.26
HAY AND FORAGE	60,876	1,450,249	24.00
VEGETABLES AND TRUCK	10,590	1,751,596	165.40
FRUITS AND NUTS	22,678	4,250,895	187.50
SUGAR BEETS	272	2,070	7.61
MISCELLANEOUS	937	217,899	232.55
TOTAL	108,758		
DUPLICATED LAND ACREAGE *	6,078		
LAND ACREAGE CROPPED	102,680	\$8,118,640	\$79.06

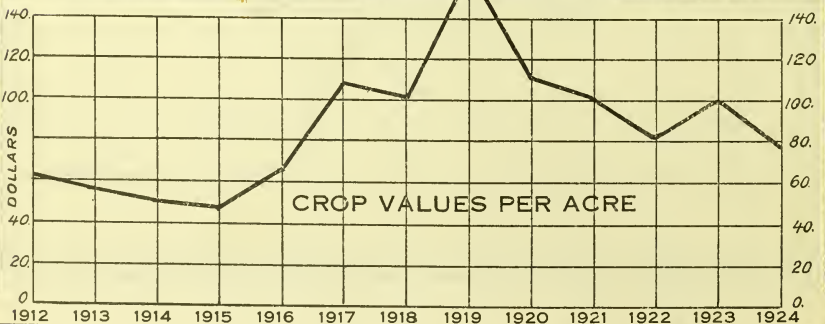
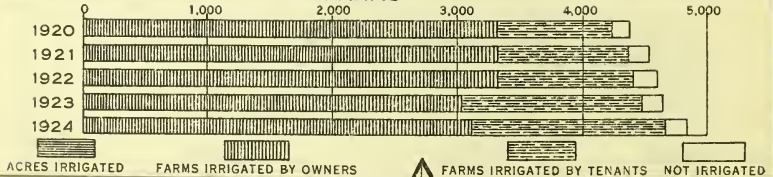
* ON 6,078 ACRES TWO OR MORE CROPS WERE GROWN DURING THIS CROP SEASON

POPULATION			LIVESTOCK		
YEAR	ON FARMS	IN TOWNS	CATTLE	SHEEP	HOGS
1914	8,816	23,300	10,392	2,029	28,938
1915	9,370	24,460	13,410	6,897	38,127
1916	10,094	25,268	16,118	6,744	22,681
1917	10,150	25,850	13,998	8,412	18,050
1918	10,405	27,400	11,897	10,088	21,855
1919	12,327	30,650	11,367	10,438	19,464
1920	14,243	29,941	13,005	6,464	18,141
1921	15,537	29,941	12,361	6,037	12,702
1922	15,874	30,250	14,774	5,947	14,535
1923	13,581	30,250	15,464	6,159	21,727
1924	13,097	30,410	16,415	10,261	16,404

ACREAGE



FARMS



The Salt River project, in Arizona, operated by the Salt River Valley Water Users' Association, continued a construction program of additional water storage and power development.

On the Yuma project, in Arizona and California, construction was started on works to protect the main canal from floods at Picacho and Un-named washes. Funds were appropriated for the construction of a power plant at the syphon drop in the main canal and advertisement for construction of this plant was issued at the end of the fiscal year. Crop returns were very satisfactory, averaging nearly \$85 per acre.

On the Orland project, in California, a serious water shortage was experienced, but very little permanent loss resulted to either fruit trees or alfalfa. Despite these conditions the water users made a splendid record in payment of charges. Plans are being made to provide additional storage.

On the Grand Valley project, in Colorado, good progress was made on the reconstruction of the Orchard Mesa irrigation system. This was taken over after failure under private construction and included as a unit of the project. The water supply in the Gunnison and Uncompahgre Rivers, although the shortest experienced for many years, was sufficient, with careful handling, for the needs of the Uncompahgre project. Crop returns were satisfactory on both projects.

On the Boise project, in Idaho, work was continued on drainage construction and on betterments of the main canal. The construction of the Black Canyon Dam was completed and water diverted to the canals of the Emmett irrigation district. The construction of a power plant at this dam was authorized and was about 65 per cent complete at the end of the fiscal year. Conditions on the King Hill project were improved by good crops and satisfactory prices. On the Minidoka project active work was begun on the American Falls Reservoir by the Utah Construction Co. Work was completed on improvements in the new townsite of American Falls and the moving of houses from the old town to the new was continued.

The Huntley project, in Montana, was operated under public notice. The Milk River project was operated on a rental basis. Construction work was commenced on the second barrels of the pipe syphon crossings on the St. Mary Canal, which were originally constructed only to a partial capacity. A beet-sugar factory which has been established on this project will materially assist in the agricultural development. On the Sun River project, the Fort Shaw division was operated under public notice and the Greenfields and Big Coulee divisions under water-rental contracts. Additional storage will be required to make profitable production on this project certain. On the Lower Yellowstone project in Montana and North Dakota, the building of a beet-sugar factory, which is in progress, will be of assistance in improving agricultural conditions.

On the North Platte project, in Nebraska and Wyoming, construction work on the Fort Laramie division was completed in the spring of 1925. Work was continued on the replacement of structures on the interstate division. Construction of the Guernsey Dam was begun.

On the Newlands project, in Nevada, the water supply for the lands irrigated from the Carson River was ample. A severe shortage, however, occurred on some 3,000 acres of the Truckee division, which were wholly dependent on Truckee River waters. Pumping from the Lahonton Reservoir and also from Lake Tahoe was resorted to in order to prevent serious loss. Crop results were in general satisfactory. Investigations were continued into the possibility of providing water for new lands from the proposed Spanish Springs Reservoir and for such of the older project lands as may want supplemental water supply.

On the Carlsbad project, in New Mexico, investigations were in progress for additional storage on the Pecos River.

On the Rio Grande project, in New Mexico and Texas, the beneficial results of the construction of the complete drainage system are apparent and the irrigated area was increased from 92,000 acres in 1923 to 131,000 acres in 1924. The progress in settlement and cultivation of project lands was very satisfactory and the crop returns were much larger than for the previous year.

The Williston project, in North Dakota, continued to be operated at a loss and steps were being taken to have the project appraised and sold to the highest bidder.

On the Umatilla project, in Oregon, active construction to provide an additional water supply was in progress on the McKay Reservoir. The Furnish and Westland projects have contracted for the purchase of 44,250 acre-feet of storage from the reservoir. Other operative and proposed projects and extensions of the Furnish and Westland districts need in the aggregate more than the balance of storage remaining. It was decided to base the apportionment of the remaining storage on the relative results to be expected from the use of the water on various areas. To this end an engineering report dealing with requisite water supply and cost of construction was made in June, 1925, and an investigation of agricultural and economic features is in progress.

On the Klamath project, in Oregon and California, construction work was in progress on the Tule Lake division to provide lateral and drainage systems for additional lands lying below the 10,000 acres opened to entry in 1922.

The Belle Fourche project, in South Dakota, was operated under public notice based on the contract with the newly organized irrigation district. Owing to lack of rainfall the demand for irrigation water was heavier than for some years and the irrigated area was increased to 48,400 acres.

On the Strawberry Valley project, in Utah, water was delivered in bulk at the head gates at the various canals which were operated by the canal companies and irrigation districts. The irrigated area was increased to 41,000 acres which was the largest in the history of the project.

The Okanogan project, in Washington, again suffered a water shortage, only about one-half of the desirable supply being available. Resort was had to pumping water by means of temporary plants and serious crop loss was by this means averted. On the Yakima project the Tieton Dam was completed. Investigations were continued on the proposed Kittitas extension. An economic survey and report, drainage report, and preliminary engineering report were made

On the Riverton project, in Wyoming, the heavy construction work was completed far enough to permit delivery of water to the first division of 15,000 acres as soon as the distribution system is constructed. The construction program on this project is being slowed down pending settlement of the lands for which water is first made available. On the Shoshone project, construction was continued on the drainage systems in the Garland and Frannie divisions and on the canal and lateral systems for the new Willwood division.

One index of the bureau's activities during the year is the number of contracts entered into and the different subjects involved, which are summarized in the following table:

Nature of contracts ¹	Number of contracts	Amount involved
Cooperative investigations.....	16	\$128, 100. 00
Supplies.....	1, 009	614, 887. 09
Material.....	399	953, 103. 30
Equipment.....	201	511, 265. 03
Miscellaneous services.....	216	310, 451. 71
Construction work.....	144	3, 636, 920. 19
Land purchases, including improvements.....	264	662, 827. 05
Land sales, including improvements.....	167	77, 170. 00
Leases to the United States.....	51	8, 689. 60
Leases from the United States.....	387	68, 912. 24
Compromise of damages.....	27	7, 741. 82
Rental of Government equipment.....	66	7, 503. 03
Rental of water.....	594	136, 534. 12
Sale of surplus electrical energy.....	38	236, 208. 52
Sale of water rights to towns.....	1	220. 50
Sale of water rights under the Warren Act ²	9	1, 056, 781. 90
Sale of water rights within projects.....	84	245, 942. 13
Miscellaneous.....	180	318, 895. 33
Total.....	3, 853	³ 8, 982, 153. 56

¹ Does not include adjustment and relief measures.

² Includes some construction work.

³ Estimated in part.

PREPARATION FOR NEW CONSTRUCTION

In the discussion of existing projects, recommendations are made for measures to relieve some projects of a part of their financial burden and on others to bring about closer settlement and better cultivation. Some of these measures would involve large expenditures. The policy adopted for old projects is important in connection with building new ones.

At its last session, Congress made appropriations for beginning construction on six new projects or divisions of old projects and storage for two others. The acre cost of these new projects, except the Salt Lake Basin in Utah, will be materially larger than on the present projects. Difficulties of settlers in meeting payments on these raises the question of what can be done to help settlers on costlier new undertakings to succeed.

A study of economic conditions and of measures needed to promote settlement and farm development on new projects is required under the amended reclamation act of December 5, 1924. The entire staff of the division of reclamation economics, with assistance from the United States Department of Agriculture, has been engaged in making soil surveys and classifying the land on these new projects. Arrangement for the organization of districts or associations and negotiation of contracts for the repayment of money spent by the Government, are in process of completion.

INVESTIGATIONS OF PROPOSED PROJECTS

SPANISH SPRINGS DIVISION (NEWLANDS PROJECT), NEVADA

Congress appropriated \$500,000 for the construction of the Spanish Springs division of the Newlands project. This is contingent on a contract with districts to be organized for repayment of costs, on appraisal of and fixing of satisfactory selling prices and terms for Southern Pacific Co. lands, and on agreement for advance payments of operation and maintenance charges. The appropriation also reserves priority in water rights for present water users of the Newlands project, on exemption of Lahontan lands from assessment of costs of Spanish Springs division, and the application of power earnings within the Spanish Springs division towards repayment of construction costs on that division. The Secretary is also authorized to contract with the State or others for aid by them in promoting development and settlement, including the necessary financing.

A report on agricultural and economic feasibility was completed in November, 1924. The area of irrigable land under the Spanish Springs development, including 7,235 acres within the Truckee division of the present Newlands project requiring a supplemental water supply, is estimated at 46,600 acres. A storage capacity at Spanish Springs site not exceeding 200,000 acre-feet will be required for this area. The cost of the project is estimated at \$6,291,000, of which \$5,067,000 is for new construction, and \$1,224,000 is for past expenditures chargeable against new acreage.

Final surveys for the location of the feed canal for Spanish Springs Reservoir were completed, resulting in the choice of the high-level line to avoid excessive costs in passing through the city of Reno. There will be a drop at the end of the canal of at least 85 feet to the maximum water level of the reservoir. It is proposed to utilize this head for the production of power to make good to the Truckee River Power Co. such reduction of power output as may result at their Reno power plant, through the diversions above, by the Spanish Springs feed canal. Negotiations are in progress for purchase of the plant or exchange of power. A detailed classification of Government and private lands possible of development from Spanish Springs Reservoir is in progress. Appraisal of Southern Pacific lands will also be made. The appraisal of the Indian lands has been delayed pending appointment of representative by the Indian Bureau. This bureau does not desire to proceed with allotments of irrigated land for Indians as provided by the act of April 21, 1904 (33 Stat. 189). This makes additional legislation necessary.

BAKER PROJECT, OREGON

The sum of \$490,000 remaining from a previous appropriation was reappropriated for the fiscal year 1926.

Following the report on land classification and economics the engineering estimates were revised in October, 1924, for the reduced acreage. The capacity of the reservoir has been reduced to 80,000 acre feet, but canal capacities were retained as in the engineering report of January, 1923. The estimated total cost of the project is \$3,700,000. About 27,000 acres will be benefited. It is expected

that the railroad company will pay one-half the cost of raising the track through the reservoir and reduce the above total by about \$100,000.

Construction work has not been undertaken under former appropriations by Congress because convincing evidence of feasibility is lacking. Additional reports and investigations made have but served to increase the doubt of feasibility indicated by former investigations. The construction of the project could not be justified under present conditions. Form of proposed contract with the Lower Powder irrigation district has been tentatively approved subject to the qualification that the department is not to be regarded by such action as committed to the construction of the project until all necessary requirements have been met and more convincing evidence of feasibility obtained.

VALE PROJECT, OREGON

Congress has appropriated \$500,000 for the project. This is contingent on a contract with districts for repayment of the cost. State aid in the selection and financing of settlers is also required.

Final report on the agricultural and economic features was made in 1924. The total area of the project comprises 31,920 acres. The cost is estimated at \$3,600,000.

Topographic mapping of the irrigable lands and a complete land classification for use in planning a distribution system was begun in May, 1925. The Oregon State Legislature at the request of the bureau and other interested parties enacted legislation for the purpose of facilitating sale by the Warm Springs irrigation district of storage rights and capacity in Warm Springs Reservoir for use on the Vale project. The State engineer subsequently made official finding that the district would be justified in disposing of one-half of the capacity of the reservoir. The ability of the irrigation district to convey to the United States title required by applicable acts of Congress to the desired quantity of water is not free from doubt. This matter is now receiving careful consideration by the legal advisers of the department. As a large part of the project land is controlled by two companies and the success of the project, in no little degree, will be dependent on the cost of raw land to the settler, negotiations for the sale of these lands at agreed prices have been under discussion with the large landowners.

OWYHEE PROJECT, OREGON-IDAHO

The sum of \$315,000 remaining from a previous appropriation was reappropriated for the fiscal year 1926.

A report on the agricultural and economic feasibility of the project was made in 1924. The area to be supplied with water is 138,400 acres. The cost is estimated at \$17,715,000.

Drilling of foundations and geological examination of the site of the diversion dam was completed and indicates a favorable site with a maximum cover to bedrock of 62 feet. Further studies and designs confirmed the choice of raising the diversion dam to provide storage in lieu of a separate reservoir at the Duncan Ferry site. The preliminary location of the main canals leading from the dam was completed and some engineering work was done on intermediate distributary canals and topographic mapping of irrigable areas. Construction roads were surveyed.

Forms of contracts for the inclusion of lands now receiving water by pumping from Snake River and to furnish supplemental water for lands under the Owyhee Ditch have been under consideration, as has also the formation of an irrigation district embracing all dry lands not now in existing districts.

Negotiations are in progress with the owners of large tracts of land in the project with a view to fixing prices and terms for transfer of these lands to actual settlers.

SALT LAKE BASIN PROJECT, UTAH

On December 5, 1924, Congress appropriated \$375,000 for the continuance of investigation and construction. By act of March 3, 1925, the unexpended balance was reappropriated. An additional appropriation of \$900,000 was made for construction conditioned on the organization of a district or association to make a contract for repayment of construction costs and for advance payment of operation and maintenance charges.

The committee appointed to review existing conditions recommended the construction of the Echo Reservoir and the diversion canal from the Weber River to Provo River. A capacity of 74,000 acre-feet was adopted for the reservoir. This is the maximum capacity feasible on account of the proximity of the town of Coalville and complications in the removal of existing roads and railroads. The estimated cost of this first development is \$3,000,000.

Relocation surveys have been made for the reconstruction on higher ground of about 5 miles of the Park City branch of the Union Pacific Railway now located through the bed of the proposed reservoir. A location satisfactory to the railroad company was obtained. Relocation surveys are in progress for the removal of the Lincoln Highway, which also traverses the reservoir bed. Designs for the Echo Reservoir have been practically completed.

Preliminary alternate locations for the diversion canal connecting the Weber and Provo Rivers across the Kamas Bench have been made. The final capacity of the canal will depend somewhat on the feasibility of storage on the Provo River. Tentatively it is proposed to provide a present capacity of 300 second-feet. This will be ample unless storage capacity is provided on the Provo River for Weber River flood waters not required for the Echo Reservoir. Provision is made for subsequent enlargement to a capacity up to 1,000 second-feet.

The canal companies and individuals which will benefit by this first development have elected to form a water users' association and guarantee repayment of expenditures of the Government by establishing a lien based on their irrigation systems and water rights. Amendments of articles of incorporation for this purpose are in progress. The association has not been organized. Tentative draft of contract to be entered into between the Government and the association, when organized, has been approved by the department.

KITTITAS DIVISION, YAKIMA PROJECT, WASHINGTON

By act of Congress of December 5, 1924, the sum of \$375,000 was appropriated for this division. On March 3, 1925, this was reappropriated, with \$375,000 additional. The latter appropriation was conditioned on a contract with a district for repayment of construction

costs, for the sale of lands within the district at appraised prices, and for the payment of operation and maintenance charges in advance. It was also provided that the State should enter into a contract to promote and finance land settlement and development.

An agricultural and economic survey of the project was made in 1924. The irrigable area comprises about 70,000 acres. The cost is estimated at \$11,100,000, of which \$8,800,000 is for new construction and \$2,300,000 for past expenditures, including storage, chargeable against new acreage.

Soil surveys were started in March and land classification in June, 1925, but are expected to be completed during the calendar year. Further drainage investigations have been carried on, and geologic reports have been made on the Easton dam site, siphon crossing, and tunnels.

Location of main canals and topographic mapping of irrigable areas are practically completed. The site of the diversion dam near Easton was diamond drilled for foundation conditions. Topographic surveys of the project area to serve as a basis for land classification and for future construction of the distribution system have been completed. The principal structures have been designed.

By contract made in 1921 with the United States the district assumed repayment of storage costs. On February 11, 1925, the district favorably voted a contract covering repayment to the United States of the cost of the distribution system, estimated at \$9,000,000. This contract was confirmed by court on March 10, 1925. The Governor of Washington, however, refused to enter into a contract providing for land settlement by the State, and landowners within the district obtained an injunction against execution of the contract on account of the land-sale feature of the contract, both of which are required by the above legislation.

DIVISION OF RECLAMATION ECONOMICS

The division of reclamation economics was organized to deal with agricultural and economic phases of reclamation. Five employees were engaged on the work in Denver and four in the headquarters office in Washington.

LAND CLASSIFICATION

The act of December 5, 1924, authorizes the Secretary of the Interior to classify the land into productive zones on the projects desiring to receive the benefits of this law. Land classification accordingly has been in progress on the Grand Valley and Uncompahgre projects, Colorado; Boise, Minidoka, and King Hill projects, Idaho; Huntley, Milk River, Sun River, and Lower Yellowstone projects, Montana; North Platte project, Nebraska-Wyoming; Newlands project, Nevada; Umatilla and Klamath projects, Oregon; Belle Fourche project, South Dakota; Strawberry Valley project, Utah; Okanogan and Yakima projects, Washington; and Shoshone project, Wyoming. The land classification work was about 85 per cent completed at the end of the fiscal year.

The following classes were generally adopted on the projects, although on some projects it was found advisable to have only three producing classes:

Class 1.—Lands that with sufficient water and under approved systems of tillage produce the best crops on the project, and that have such even topography that they may be easily irrigated, with a minimum of leveling and labor under the approved system of irrigation practice for the project. These are the best lands on the project, of good soil and good topography.

Class 2.—Lands of the same productive power as those in class 1, but with a topography so uneven as to require more expense and more labor in the tillage and irrigation of the fields. Such lands because of their topographic difficulties are generally less capable of sustaining a completely diversified kind of agriculture. These are usually good lands of poor topography.

Class 3.—Lands of lower fertility or productive power, even with ample water and under good systems of husbandry, than those of the above classes. These lands may have an even topography, and therefore are easily irrigated, but are incapable of producing the yields of the lands under classes 1 and 2. The cause of this infertility may be inherent in the soil or may be due to alkali, gumbo, blow sand, shale, shallow or porous soil, or other factors characteristic of the project. These are poor lands, often of good topography.

Class 4.—Lands of poorer productivity than those of Class 3, or of the same grade as Class 3, but with such unfavorable topography as to increase the expense of cultivation and irrigation and to decrease the crop yield. These are poor lands, of poor topography, often with excessive slopes.

Class 5.—Lands that are not at present susceptible of agricultural use, but which may gradually by tillage and under changing conditions be made sufficiently productive to justify cropping. Included in this class are alkali and water-logged lands that may be improved by drainage; excessively heavy soils that may be improved by the incorporation of organic matter or indirect fertilizers; light sandy soils that may be firm by plant roots; steep soils that may be leveled; and other similar soils.

Class 6.—Lands that appear to be permanently nonagricultural under the practices of irrigation farming.

SETTLEMENT AND DEVELOPMENT ACTIVITIES

Progress in settlement of existing projects has been slow and discouraging. Only one project (the Rio Grande, New Mexico-Texas) has received any considerable number of settlers. This was the outcome of coordinated effort by the Gateway Club, El Paso, Tex., the Santa Fe Railroad, and district organizations. By advertising in more than 500 papers and periodicals circulating throughout the United States and Canada and by personal solicitation, from 600 to 800 settlers were secured.

Some of the railroad companies serving the projects have been quite active, but report that the results are disappointing.

Conferences were held with railroads, chambers of commerce, and water users organizations to devise a coordinated plan under which private lands offered for sale would be appraised by a competent

local board and sold under terms and conditions in conformity with the earning power of the land; that advertising be done cooperatively, clearly, and truthfully, describing the opportunities offered; and that care be exercised in the selection of settlers. Four projects are endeavoring to form such organizations and have shown active interest in obtaining purchasers for lands now farmed by tenants or abandoned.

Representatives of the division of reclamation economics have met with organizations of water users and business men in regard to the extension of cooperative marketing. Conferences were also held with bankers and commercial organizations in regard to long time and intermediate credit. As a result, the growth and influence of these institutions have increased during the year.

LEGAL ACTIVITIES

In the construction, operation, and maintenance, and administration of Federal irrigation projects, the bureau is confronted with an array of legal problems. Settlement of water rights, preparing contracts for the building of irrigation works, purchase of machinery, equipment, and other materials, acquisition of rights of way and easements over lands needed for project development, are matters requiring the services of members of the legal profession. There are 14 attorneys in the bureau, 4 at the Washington headquarters and 10 in the field, located at Berkeley, Calif.; Denver and Montrose, Colo.; Boise, Idaho; Billings, Mont.; Mitchell, Nebr.; Portland, Oreg.; and El Paso, Tex.

A large part of the work devolving upon the law officers of the bureau during the latter part of the fiscal year had its origin in the act of Congress approved December 5, 1924, popularly known as the "fact finders' law." A bill embodying the recommendations of the special advisers on reclamation, after introduction was amended in certain respects and the bill was attached to and passed as a part of the second deficiency act, fiscal year 1924.

The necessity for interpretation of doubtful provisions soon became apparent. A study of the various provisions was promptly made by the law officers of the bureau and within a short time the department construed for the guidance of all concerned those provisions hedged with uncertainty.

Unfortunately certain important provisions are not free from ambiguity, which makes it difficult for the department to administer the law. Further action by Congress may become necessary in order to clarify those provisions now fraught with uncertainty. It is highly desirable that the law be made so plain that there will be no room for uncertainty either on the part of administrative officers or water users. Specific recommendation upon this subject will be made to Congress at the proper time.

Regulations necessary to effectuate the various provisions of the law were issued from time to time as necessity arose, but only after mature consideration and with the aid of such experience as could be gained before regulations became urgently necessary to prevent delaying action unduly. This course was considered preferable to

the hasty issuance of regulations which experience might show to be impracticable. The wisdom of this course has been fully vindicated by events in this and in other cases.

The drafting of contracts for making effective the far-reaching provisions of the new law has introduced legal problems unsuspected until the work was undertaken. This task was rendered more complex by contracts of various kinds already outstanding on almost all of the existing projects. The new law necessitates a radical departure from the method formerly in vogue, with which the irrigation district and other State laws had been gradually brought into harmony. Fortunately it appears that it will be possible to operate under the laws of most States without material changes.

In an effort to forestall the inordinate delay and expense usually attendant upon water adjudication proceedings, some of which have consumed a dozen years or more, a new procedure has been inaugurated in connection with the Carson River suit affecting lands in Nevada and California. This suit is necessary for protection of the water supply of the Newlands project. Many of the rights have been already passed upon by administrative officers of the States of Nevada and California and the courts of those States, but such rights have not been coordinated, particularly as between claimants of the States named. By a special act of Congress the courts of either State are empowered to hear and determine all rights. Accordingly a suit has been filed in the United States District Court for the District of Nevada, including owners and claimants of water rights on the watershed in both States. Ordinarily the whole issues are tried *de novo*, necessitating the taking of testimony bearing upon each individual right regardless of the determination already made. In this case it is proposed by stipulation of the parties in interest to adopt the findings heretofore made by the State officials and the courts, supplementing such findings only as to rights not so covered. This, of course, is done only where the interested parties upon investigation are satisfied that the findings so made are substantially correct. The procedure proposed gives promise of saving a tremendous amount of time and expense to the water users affected, at the same time affording necessary protection to all.

In *Nampa and Meridian Irrigation District v. Bond* (decided April 13, 1925) the Supreme Court of the United States had under consideration the distinction between construction charges and operation and maintenance charges on an irrigation project. In 1915 the United States and the district entered into a compact by which the Government constructed certain drains to benefit the lands of the district, which are virtually a part of the Boise Federal reclamation project. In the contract the district agreed to pay the Government the construction charges on certain dry lands called "project lands," of the district. The contract provided that the project lands in the district "shall pay the same operation and maintenance charge per acre as announced by the Secretary of the Interior for similar lands of the Boise project." The Government, after the construction of the project, found that certain lands not in the district were deteriorating by reason of seepage developing. Drains were constructed to relieve this condition, and the cost was assessed as a part of the operation and maintenance charge.

The district objected to the payment of this item in the operation and maintenance bill, and brought a suit to enjoin the superintendent of the Boise project from shutting off water for nonpayment of the charges. The district court dismissed the bill (283 Fed., 569), and its decree was affirmed by the Circuit Court of Appeals (288 Fed. 541). On appeal the Supreme Court upheld the action of the lower courts. Among other things the Supreme Court said:

Expenditures necessary to construct an irrigation system and put it in condition to furnish and properly distribute a supply of water are chargeable to construction; but when the irrigation system is completed, expenditures made to maintain it as an efficient going concern and to operate it effectively to the end for which it was designed, are, at least, generally, maintenance and operating expenses * * *. It is not necessary that each expenditure for maintenance or operation considered by itself shall directly benefit every water user in order that he may be called upon to pay his proportionate part of the cost. If the expenditure of to-day does not especially benefit him, that of yesterday has done so or that of to-morrow will do so. The irrigation system is a unit, to be, and intended to be, operated and maintained by the use of a common fund to which all the lands under the system are required to contribute ratably without regard to benefits specifically and directly received from each detail to which the fund is from time to time devoted.

DISCUSSION OF PROJECTS

PRIMARY PROJECTS

ARIZONA, SALT RIVER PROJECT

The Salt River project irrigates 203,527 acres of land of the shareholders of the Salt River Valley Water Users' Association and 24,998 acres on a rental basis and under the Warren Act, all located in the Salt River Valley, Maricopa County, Ariz. The range of temperature over a period of 35 years was from 22 to 117° with an average annual rainfall of 8.34 inches. The soil varies from sandy to silt and clay loam of great fertility. Farming is highly diversified, the climate permitting cultivation during the entire year. The major crops are cotton, alfalfa, grain, citrus and deciduous fruits, cantaloupes, grapes, small fruits, vegetables, dairy products, etc. Local, Pacific coast, and eastern markets absorb surplus production.

Operation and settlement data, Salt River project

Item	1921-22	1922-23	1923-24	1924-25
Acreage for which works were prepared to supply water.....	213, 168	213, 170	213, 170	236, 000
Acreage irrigated.....	203, 346. 50	204, 590. 50	204, 590	233, 500
Miles of canals operated.....	863. 35	863. 35	967. 9	975. 55
Water diverted (acre-feet).....	1, 231, 031	¹ 1, 215, 035	¹ 1, 075, 150	² 1, 397, 614
Water delivered to land (acre-feet).....	534, 526. 07	566, 715	590, 613	741, 959
Acre-feet per acre for area under cultivation.....	³ 2. 635	³ 2. 770	³ 2. 89	³ 4. 16
Total number of farms on project (when completed) ⁴	5, 000	5, 000	5, 500	6, 500
Number of farms reported ⁴	5, 000	5, 000	5, 500	6, 300
Operated by owners or managers ⁴			4, 600	5, 400
Operated by tenants ⁴			900	900
Population ⁵	33, 600	36, 000	36, 000	39, 000
Number of towns.....	14	14	12	12
Population.....	42, 500	44, 000	51, 000	55, 000
Total population of towns and farms.....	76, 100	80, 000	87, 000	94, 000
Number of public schools.....	60	60	63	65
Number of churches.....	65	65	65	66
Number of banks.....	20	20	15	15
Total capital stock.....	\$1, 755, 500	\$1, 755, 500	\$1, 600, 000	\$1, 600, 000
Amount of deposits.....	\$17, 776, 336	\$21, 331, 600	\$25, 000, 000	\$25, 580, 000
Number of depositors.....	38, 000	39, 500	40, 000	41, 000

¹ Net Salt River Valley Water Users' Association, inclusive of 185,000 acre-feet flood water diverted for power.

² Net diverted and developed for irrigation. Does not include water diverted and wasted, water diverted for power, or water delivered to canal systems not a part of the project.

³ Amount of water per acre actually charged for; 20 per cent less than the amount of water delivered to the land.

⁴ Estimated.

⁵ Includes population within town-site areas.

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$5, 000
Unencumbered balance June 30, 1925.....	5, 000
Fiscal year 1926: Amount specified in appropriation acts.....	5, 000

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$14, 662, 033. 96	\$9, 450. 28	\$14, 671, 484. 24
Less collections.....	6, 539, 933. 23	-----	6, 539, 933. 23
Net investment, June 30, 1925.....	8, 122, 100. 73	9, 450. 28	8, 131, 551. 01

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....		\$11, 292, 362. 55
Value of works taken over.....		1, 451, 860. 04
Total construction cost.....		12, 744, 222. 59
Operation and maintenance prior to public notice (net).....		115, 993. 50
		\$12, 860, 216. 09
Less:		
Construction revenues.....		2, 312, 096. 81
Nonreimbursable cost.....		382, 097. 31
		2, 694, 194. 12
Total to be repaid by water users.....		10, 166, 021. 97
Repayment:		
Contract: Salt River Valley Water Users' Association.....		10, 166, 021. 97

Status of current accounts receivable June 30, 1925

	Due		Collected	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925
Construction:				
Water right charges.....	\$609, 961. 32	\$2, 306, 883. 96	\$609, 961. 32	\$2, 306, 883. 96
Charges paid in advance.....			¹ 10, 635. 34	-----
Miscellaneous:				
Rentals of irrigation water.....		2, 246, 726. 01		2, 246, 726. 01
Rentals of power and light.....		998, 411. 03		998, 411. 03
Rentals of grazing and farming lands.....		19, 373. 14		19, 373. 14
Interest and penalties.....			59, 907. 52	109, 684. 31
Other.....				858, 854. 78
Grand total collections.....			659, 233. 50	6, 539, 933. 23

¹ Contra.**ARIZONA-CALIFORNIA, YUMA PROJECT**

The Yuma project, exclusive of the Mesa division, comprises 65,000 acres of irrigable land for a distance of 38 miles from the boundary between Arizona and Mexico, in Yuma County, Ariz., and Imperial County, Calif. The soils are rich alluvium bottom land. The principal crops are cotton and alfalfa. The irrigation season is 365 days. The average temperatures for 29 years are: High, 115°; low, 28° F.; rainfall, 40-year average, 3.1 inches.

The Mesa division comprises 45,000 acres of mesa land lying about 80 feet above the valley. The soil is sandy and the climate frostless and well adapted to the growing of citrus and other semitropical fruits.

Operation and settlement data; Yuma project, Arizona-California

Item	1920	1921	1922	¹ 1923	¹ 1924
Area for which bureau was prepared to supply water.....	65,000	65,000	67,200	² 71,000	³ 70,500
Acreage irrigated.....	54,550	52,400	53,970	⁴ 53,925	⁵ 53,843
Miles of canal operated.....	323.2	323.2	345	370.26	370.26
Water diverted (acre-feet) ⁶	468,900	482,000	546,634	672,867	665,898
Water delivered to land (acre-feet).....	160,330	140,900	140,056	154,271	185,373
Acre-feet to acre for area under cultivation.....	2.94	2.69	2.59	2.90	3.44
Total number of farms on project (when completed).....	5,750	5,750	5,750	5,750	6,000
Number of irrigated farms.....	1,230	1,211	⁷ 1,216	1,207	1,304
Operated by owners and managers.....	711	825	762	675	662
Operated by tenants.....	519	386	536	532	642
Population.....	5,100	4,800	4,200	3,800	3,350
Number of towns.....	6	5	5	5	5
Population.....	7,110	6,665	6,700	5,730	6,890
Total population of towns and farms.....	12,210	11,465	10,900	9,530	10,240
Number of public schools.....	15	16	16	16	612
Number of churches.....	⁸ 23	⁸ 23	⁸ 24	⁸ 24	15
Number of banks.....	6	5	5	5	5
Total capital stock.....	\$255,000	\$230,000	\$280,000	\$280,000	\$280,000
Amount of deposits.....	\$2,100,000	\$1,927,000	\$3,095,800	\$3,378,330	\$2,664,296
Number of depositors.....	9,175	5,900	6,382	6,970	8,492

¹ Includes Yuma Mesa lands.² Project proper, 63,163 acres under public notice; 57,500 acres covered by crop census.³ Reduction due to error in 1923 which should have been 70,500.⁴ Project proper, 53,270 acres.⁵ Project proper, 53,180.⁶ Of the water diverted, from 100,000 to 200,000 acre-feet each year are wasted, of which the largest part flows into the Colorado River at the California Spillway near Yuma, and this water can be diverted for irrigation further down the river.⁷ A few farms operated partly by owners and partly by tenants.⁸ Total religious organizations; figures for 1924 are for church buildings only.*Appropriations*

Fiscal year 1925:

Congressional authorizations.....	\$927,264.77
Disbursements.....	\$406,469.49
Liabilities outstanding.....	179,165.35
	585,634.84

Unencumbered balance June 30, 1925.....

341,629.93

Fiscal year 1926: Amounts specified in appropriation acts.....

1,432,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$12,828,380.26	\$158,366.59	\$12,986,746.85
Less collections.....	4,496,699.20		4,496,699.20
Net investment June 30, 1925.....	8,331,681.06	158,366.59	8,490,047.65

Construction account

	Fiscal year 1925	To June 30, 1925	
Cost of irrigation works:			
Original construction.....	\$2,742.10	\$8,747,631.78	
Supplemental construction.....	104,127.39	104,127.39	
Total construction cost.....	106,869.49		\$8,851,759.17
Operation and maintenance prior to public notice (net).....	² 1,431.66	371,617.49	
Operation and maintenance deficits and arrearages to be repaid with construction.....	1,919.39	1,945.71	
			373,563.20
Less:			9,225,322.37
Contributed funds.....		101,113.89	
Construction revenues.....	2,609.95	57,465.10	
			158,578.99
Total to be repaid by water users.....	104,747.27		9,066,743.38
Contracted repayments:			
Water-right contracts (individuals).....	59,976.14	4,401,623.92	
Contract—Imperial irrigation district.....		1,600,000.00	
Total.....	59,976.14		6,001,623.92

¹ Plus certain unexpended balances of 1925 appropriation.² Contra.

Operation and maintenance account

	Calendar 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$379,998.74	\$2,385,132.50	\$308,151.17	\$2,528,755.93
Operation and maintenance returns:				
Contracted.....	396,107.77	1,785,730.48	326,710.23	1,794,260.95
Penalties.....	16,419.60	48,732.53	10,489.44	55,508.08
Discounts (contra).....	6,193.53	20,039.85	8,390.34	27,849.73
Miscellaneous revenues.....	¹ 64,369.32	103,009.99	3,621.85	111,572.62
Subtotal.....	341,964.52	1,917,433.15	332,431.18	1,933,491.92
Other credits:				
Operation and maintenance deficits and arrears to be repaid with construction.....	1,919.39	1,945.71	1,919.39	1,945.71
Total.....	343,883.91	1,919,378.86	334,350.57	1,935,437.63
Results:				
Excess.....			26,199.40	
Deficit.....	36,114.83	465,753.64		593,318.30

¹ Contra.*Status of current accounts receivable as of June 30, 1925*

	Due		Collected				Uncol- lected June 30 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$312,819.92	\$1,784,347.38	\$359,848.34	\$1,650,700.21	\$859.39	\$4,024.28	\$129,622.89
Contributed funds		101,113.89		101,113.89			
Total	312,819.92	1,885,461.27	359,848.34	1,751,814.10	859.39	4,024.28	129,622.89
Charges paid in ad- vance			1 6,928.39	838.28		146.81	
Construction refunds				1,583.60			
Operation and mainte- nance:							
Water-right charges, project lands (62,- 812.39 acres)	328,629.62	1,794,260.95	299,856.69	1,590,520.94	9,396.22	32,974.14	170,765.87
Penalties and interest	10,489.44	55,508.08	9,572.73	54,290.82	99.14	399.69	817.57
Charges paid in ad- vance			1 738.14	735.69		559.20	
Operation and main- tenance refunds				248.91			
Miscellaneous:							
Rentals of irrigation water	2,028.71	446,327.44	1,664.58	441,863.87		292.01	4,171.56
Rentals grazing and farming lands	3,118.60	16,975.62	2,998.60	16,702.45			273.17
Construction forfeit- ures			374.24	3,554.18			
Construction penal- ties and interest	12,743.99	103,853.76	10,444.88	101,554.65			2,299.11
Other			31,076.77	532,991.71			2,182.55
Grand total collec- tions			708,170.30	4,496,699.20			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 7.83 per cent of total accruals.
Uncollected operation and maintenance charges as of June 30, 1925, 9.25 per cent of total accruals.

YUMA AUXILIARY PROJECT, ARIZONA

Appropriations

	Yuma auxiliary fund, without year	Reclamation fund, fiscal year 1925-26
Congressional authorizations.....	\$830, 273. 33	\$200, 000. 00
Less disbursements and liabilities outstanding.....	788, 429. 41	13, 340. 27
Unencumbered balance, June 30, 1925.....	41, 843. 92	186, 659. 73

Voucher transactions

	Reclamation fund	Yuma auxiliary fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$7, 694. 74	\$788, 429. 41	\$15, 851. 45	\$811, 975. 60
Less collections.....		830, 273. 33		830, 273. 33
Net investment June 30, 1925.....	7, 694. 74	¹ 41, 843. 92	15, 851. 45	¹ 18, 297. 73

¹ Contra.*Construction account*

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction.....	\$4, 416. 16	\$839, 306. 26
Operation and maintenance prior to public notice.....	¹ 20. 00	¹ 40. 00
		\$839, 266. 26
Less: Construction revenues.....	53. 26	1, 068. 23
Total to be repaid by water users.....	4, 342. 90	838, 198. 03
Contracted repayments: Water-right contracts (individuals).....	¹ 158, 990. 41	952, 476. 33

¹ Contra.*Operation and maintenance*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$41, 519. 13	\$108, 144. 18	\$51, 331. 15	\$139, 979. 04
Operation and maintenance returns:				
Contracted.....	56, 128. 92	125, 878. 96	51, 828. 60	171, 551. 96
Penalties.....	85. 75	537. 74		537. 74
Discount (contra).....	¹ 3. 50	1, 106. 79		1, 106. 79
Miscellaneous revenues.....	75. 00	150. 00	507. 00	657. 00
Totals.....	56, 293. 17	125, 459. 91	52, 335. 60	171, 639. 91
Results: Excess.....	14, 774. 04	17, 315. 73	1, 004. 45	31, 660. 87

¹ Contra.

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	¹ \$150,926.00	\$784,790.00	¹ \$24,424.25	\$550,525.56	-----	-----	\$234,264.44
Land sales.....	¹ 21,927.00	107,043.53	¹ 3,812.00	75,401.09	-----	-----	31,642.44
Total.....	¹ 172,853.00	891,833.53	¹ 28,236.25	625,926.65	-----	-----	265,906.88
Interest.....	501.68	35,977.14	501.68	35,977.14	-----	-----	-----
Forfeitures.....	13,650.91	24,085.66	13,650.91	24,085.66	-----	-----	-----
Refunds.....	-----	-----	1,159.25	1,328.35	-----	-----	-----
Operation and maintenance:							
Water-right charges.....	51,828.60	171,551.96	40,090.03	94,745.56	-----	1,106.79	75,699.61
Interest.....	-----	537.74	-----	537.74	-----	-----	-----
Charges paid in advance.....	-----	-----	¹ 217.75	7.00	-----	-----	-----
Miscellaneous:							
Rentals of irrigation water.....	527.00	697.00	95.00	265.00	-----	-----	432.00
Other miscellaneous collections.....	-----	-----	7,713.79	47,400.23	-----	-----	1,664.85
Grand total collections.....	-----	-----	34,756.66	830,273.33	-----	-----	-----

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 29.9 per cent of total accruals.
Uncollected operation and maintenance charges as of June 30, 1925, 44.1 per cent of total accruals.

CALIFORNIA, ORLAND PROJECT

The Orland project is located in Glenn and Tehama Counties, with reservoir in Colusa County. The average elevation above sea level is 250 feet; the mean seasonal rainfall, 18 inches; and the temperature range, 19° to 114° F. The soil is sandy and gravelly loam, silt loam, and clay loam. The principal products are alfalfa, milo, citrus and other fruits, nuts, and vegetables.

Operation and settlement data, Orland project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	¹ 20,533	² 20,657	³ 20,665	³ 20,665	³ 20,660
Acreage irrigated.....	13,872	14,697	15,119	15,500	11,970
Miles of canal operated.....	138	146	146	146	121
Water stored (acre-feet).....	62,000	13,680	63,460	36,250	21,790
Water diverted (acre-feet).....	33,800	68,867	76,632	73,191	17,023
Water delivered to land (acre-feet).....	20,600	44,200	50,589	47,363	10,451
Per acre of land irrigated (acre-feet).....	1.49	3.01	3.34	3.06	0.88
Total number of farms on project.....	908	936	968	988	998
Population.....	2,200	2,250	2,275	2,300	2,100
Number of irrigated farms.....	644	663	693	703	673
Operated by owners or managers.....	592	589	568	569	562
Operated by tenants.....	52	74	125	134	111
Population.....	1,844	1,892	1,909	1,945	1,750
Number of towns.....	1	1	1	1	1
Population.....	1,700	1,700	1,700	1,700	1,700
Total population.....	3,900	3,950	3,975	4,000	3,800
Number of public schools.....	10	10	10	10	10
Number of churches.....	7	7	7	7	7
Number of banks.....	2	2	2	2	2
Total capital stock.....	\$171,000	\$171,000	\$171,000	\$171,000	\$171,000
Amount of deposits.....	\$1,020,000	\$896,000	\$995,000	\$1,107,000	\$1,041,000
Number of depositors.....	2,900	2,800	2,900	3,000	2,950

¹ Includes 320 acres of vested water rights and 46 acres of town and school sites.² Includes 320 acres of vested water rights and 162 acres of school and town sites.³ Includes 320 acres of vested rights and 171 acres of school and town sites.

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$99,625.04
Disbursements.....	\$28,470.12	
Liabilities outstanding.....	2,872.12	
		31,342.24
Unencumbered balance June 30, 1925.....		68,282.80
Fiscal year 1926: Amount specified in appropriation acts.....		84,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$1,526,032.26	\$31,825.28	\$1,557,857.54
Less collections.....	769,985.75		769,985.75
Net investment June 30, 1925.....	756,046.51	31,825.28	787,871.79

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$194.87	\$920,403.20
Supplemental construction.....	1,173.03	221,461.19
Total construction cost.....	1,367.90	1,141,864.39
Operation and maintenance prior to public notice (net).....	¹ 148.50	¹ 11,878.49
		\$1,129,985.90
Less: Construction revenue.....	986.16	15,574.72
Total to be repaid by water users.....	233.24	1,114,411.18
Contracted repayments: Water-right contracts (Individuals).....	¹ 357.50	1,119,215.25

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$28,365.45	\$262,924.20	\$29,737.79	\$279,856.89
Operation and maintenance returns:				
Contracted.....	33,276.46	278,982.19	33,276.44	278,982.17
Penalties.....	34.47	74.44	59.62	125.34
Discounts (contra.).....	875.30	12,982.75	917.00	13,025.94
Miscellaneous revenues.....	16.45	1,551.44	193.20	1,730.69
Total.....	32,452.08	267,625.32	32,612.26	267,812.26
Results:				
Excess.....	4,086.63	4,701.12	2,874.47	
Deficit.....				12,044.63

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$66,455.68	\$371,255.58	\$36,659.79	\$340,263.58			\$31,022.00
Charges paid in advance.....				5,385.16			
Operation and maintenance:							
Water-right charges, project lands (20,167.5 acres).....	33,276.44	278,982.17	25,775.49	259,189.39	\$917.00	\$13,025.94	6,766.84
Penalties and interest.....	59.62	125.34	59.62	125.34			
Operation and maintenance refunds.....			17.98	17.98			
Miscellaneous:							
Rentals of irrigation water.....	220.50	120,604.50	220.50	120,604.50			
Rentals grazing and farming lands.....		79.50		79.50			
Construction forfeitures.....			97.24	196.33			
Construction penalties and interest.....	931.51	968.93	931.51	968.93			
Other.....			2,218.90	43,155.04			
Grand total collections.....			65,981.03	769,985.75			

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 8.4 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 2.4 per cent of total accruals.

COLORADO, GRAND VALLEY PROJECT

The Grand Valley project is located in Mesa County, Colo., on the main line of the Denver & Rio Grande Western Railroad. The average elevation of the irrigable area is 4,700 feet, the average annual rainfall is 8.3 inches, and the average range of temperature is from 99 to -7° F. The soils consist of red mesa, sandy loam, and adobe. The principal crops are alfalfa, sugar beets, grain, corn, fruit, potatoes, and vegetables.

Operation and settlement data, Grand Valley project

Item	1920	1921	1922	1923	1924
Acreage for which bureau is prepared to supply water.....	1 38,400	1 38,400	1 38,400	2 48,400	2 46,750
Acreage irrigated.....	1 19,484	1 20,590	1 20,672	2 23,770	2 25,250
Miles of canals operated.....	175	175	175	175	175
Water diverted, acre-feet.....	1 142,527	1 145,416	1 166,404	2 247,267	2 272,824
Water delivered to land, acre-feet.....	4 36,024	4 43,978	4 46,290	4 48,526	4 58,375
Per acre of land irrigated.....	4 3.07	4 3.57	4 3.74	4 3.77	4 4.34
Total number of farms on project ¹	825	825	825	825	825
Population.....	1,019	1,064	1,134	1,185	1,215
Number of irrigated farms.....	376	402	387	396	453
Operated by owners or managers.....	251	264	217	229	296
Operated by tenants.....	125	138	170	167	157
Population.....	1,019	1,064	1,134	1,185	1,215
Number of towns.....	6	6	6	6	6
Population ²	11,415	11,246	11,246	11,246	11,246
Total population in towns and on farms ³	12,434	12,310	12,380	12,431	12,461
Number of public schools ⁴	23	23	24	24	24
Number of churches ⁵	28	28	28	28	32
Number of banks ⁶	7	7	7	6	6
Total capital stock ⁶	\$465,000	\$465,000	\$465,700	\$452,300	\$445,000
Amount of deposits ⁶	\$3,259,780	\$3,621,420	\$3,520,500	\$3,237,000	\$3,927,200
Total number of depositors ⁶	10,150	10,975	8,825	9,850	12,600

¹ Includes data for Palisade and Mesa County irrigation districts.

² Includes data for Orchard Mesa, Palisade, and Mesa County irrigation districts; project proper, 30,000 acres to which bureau could supply water; 12,870 acres irrigated.

³ Orchard Mesa, Palisade, and Mesa County districts included; project proper, 30,000 acres irrigable; 13,460 acres irrigated.

⁴ Project lands only.

⁵ Estimated.

⁶ These items include areas adjacent to project.

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$538,515.30
Disbursements.....	\$321,854.41	
Liabilities outstanding.....	55,578.83	
		377,433.24
Unencumbered balance June 30, 1925.....		161,082.06
Fiscal year 1926: Amount specified in appropriation acts.....		278,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$5,119,911.72	\$77,512.18	\$5,197,423.90
Less collections.....	443,451.06		443,451.06
Net investment June 30, 1925.....	4,676,460.66	77,512.18	4,753,972.84

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction.....	\$380,834.82	\$4,633,156.24
Operation and maintenance prior to public notice (net).....	¹ 4,443.83	113,505.23
		\$4,746,661.47
Less: Construction revenues.....	2,698.62	59,643.70
Total to be repaid by water users.....	373,692.37	4,687,017.77
Contracted repayments: Contract, Orchard Mesa irrigation district.....		1,000,000.00

¹ Contra.*Status of current accounts receivable as of June 30, 1925*

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Miscellaneous:							
Rentals of irrigation water.....	\$52,244.23	\$327,723.32	\$50,655.85	\$295,184.56	\$1,454.99	\$5,455.13	\$27,083.63
Rentals grazing and farming lands.....	65.00	344.00	77.00	294.00	7.50	7.50	42.50
Other.....			10,258.32	147,972.50			32.72
Grand total collections.....			60,991.17	443,451.06			

COLORADO, UNCOMPAHGRE PROJECT

The Uncompahgre project is in southwestern Colorado, in Montrose and Delta Counties, on the Denver & Rio Grande Western Railroad. The irrigation season extends generally from April 1 to October 31, 214 days, in all Government canals. The average elevation of the irrigable area is 5,500 feet above sea level; the average annual precipitation on the project for 23 years, 9.48 inches; and the average range of temperature, 10° to 95° F. The soils of the irrigable area are red sandy gravel, adobe, and clay loams. The principal products are alfalfa, grain, sugar beets, potatoes, onions, fruits, and other vegetables. The principal markets are Denver, Omaha, Kansas City, and the West for livestock; Denver, Missouri River points, and Texas for fruit, potatoes, and onions.

Operation and settlement data, Umcompahgre project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	100,000	¹ 97,410	97,410	97,060	² 96,510
Acreage irrigated.....	64,180	63,760	64,730	64,320	³ 63,350
Miles of canal operated.....	448	452	467	489	532
Water diverted (acre-feet).....	429,820	446,225	427,706	439,452	379,144
Water delivered to land (acre-feet).....	365,853	415,599	422,398	328,877	303,814
Per acre of land irrigated (acre-feet).....	5.70	6.52	6.52	5.11	4.89
Total number of farms on project.....	2,000	2,000	2,000	2,000	2,000
Population.....	6,015	6,166	6,149	6,097	5,822
Number of irrigated farms.....	1,588	1,639	1,624	1,694	1,599
Operated by owners or managers.....	1,077	941	944	962	911
Operated by tenants.....	511	698	680	732	688
Population.....	6,015	6,166	6,149	6,097	5,822
Number of towns.....	3	3	3	3	3
Population.....	7,450	7,450	7,450	7,450	7,400
Total population in towns and farms.....	13,465	13,616	13,599	13,547	13,222
Number of public schools.....	27	27	27	26	26
Number of churches.....	27	27	27	27	27
Number of banks.....	8	8	7	6	6
Total capital stock.....	\$621,763	\$618,250	\$550,100	\$505,136	\$505,136
Amount of deposits.....	\$4,925,150	\$3,219,773	\$2,930,700	\$3,232,626	\$3,301,367
Number of depositors.....	11,000	11,000	11,250	11,250	11,250

¹ Decrease due to reclassification.² Prospect proper, 95,200.³ Project proper, 62,180.*Appropriations*

Fiscal year 1925:	
Congressional authorizations.....	\$186,368.38
Disbursements.....	\$133,197.94
Liabilities outstanding.....	5,319.63
	138,517.57
Unencumbered balance June 30, 1925.....	47,850.81
Fiscal year 1926: Amount specified in appropriation acts.....	163,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$8,296,668.26	\$103,089.22	\$8,399,757.48
Less collections.....	1,637,004.89		1,637,004.89
Net investment June 30, 1925.....	6,659,663.37	103,089.22	6,762,752.59

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$168.61	\$6,363,850.74
Value of works taken over.....	900.00	74,062.17
Total construction cost.....	1,068.61	6,437,912.91
Operation and maintenance prior to public notice (net).....	¹ 3,013.35	301,713.15
Less construction revenues.....	¹ 1,306.64	\$6,739,626.06
		29,665.24
Total to be repaid by water users.....	¹ 638.10	6,709,960.82
Contracted repayments: Water-right contracts (individuals).....		6,713,584.50

¹ Contra.

Operation and maintenance account

	Calendar year 1924	To Dec. 31 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost-----	\$141,351.37	\$281,845.74	\$138,105.43	\$357,842.60
Operation and maintenance returns:				
Contracted-----	136,990.85	295,386.35	137,204.91	295,046.36
Penalties-----	494.45	494.45	2,116.94	2,296.19
Discounts (contra)-----	2,801.77	5,983.39	2,745.63	6,057.65
Miscellaneous revenues-----	3,269.15	4,049.46	3,499.38	6,761.23
Total-----	137,952.68	293,946.87	140,075.60	298,046.13
Results:				
Excess-----		12,101.13	1,970.17	
Deficit-----	3,398.69			59,796.47

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$106, 124. 59	\$370, 622. 96	\$23, 818. 90	\$77, 833. 69	\$8, 433. 44	\$43,265.88	\$249, 523. 39
Charges paid in ad- vance			1 48. 50	63. 16	1 6,590. 80	34, 241. 12	
Operation and mainte- nance:							
Water-right charges, project lands (93,025 acres)	137, 204. 91	295, 046. 36	69, 196. 11	152, 119. 47	7, 175. 18	12, 803. 75	130, 123. 14
Penalties and interest ..	2, 116. 94	2, 296. 19	492. 24	617. 15	144. 83	199. 17	1, 479. 87
Charges paid in ad- vance			1 265. 39	236. 22	115. 30	201. 00	
Miscellaneous:							
Rentals of irrigation water	6, 517. 99	1, 195, 632. 14	10, 016. 07	1, 164, 281. 63	888. 15	12, 978. 59	18, 371. 92
Rentals grazing and farming lands	45. 00	242. 45	45. 00	242. 45			
Construction penalties and interest	5, 603. 48	10, 612. 60	3, 621. 65	8, 041. 70	124. 45	713. 52	1, 857. 38
Other			2, 376. 43	233, 569. 42			1, 657. 15
Grand total collec- tions			109, 252. 51	1, 637, 004. 89			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 67.3 per cent of total accruals. Uncollected operations and maintenance charges as of June 30, 1925, 44.1 per cent of total accruals.

IDAHO, BOISE PROJECT

The Boise project is located in the counties of Ada, Boise, Canyon, and Elmore, Idaho; and Malheur, Oreg. The length of the irrigation season is 184 days from April 5. The average elevation of the irrigable area is 2,500 feet above sea level. The rainfall at Boise for 61 years averaged 13.53 inches. The average highest recorded temperature for 26 years is 102° F., and the average lowest temperature for the same period is 1° F. The character of the soil is clayey loam, light sandy loam, and sandy loam. The principal products are alfalfa, wheat, oats, clover, potatoes, apples, prunes, and head lettuce. The principal markets are Boise, Nampa, Caldwell, and Meridian, Idaho; Portland, Oreg.; and eastern cities.

Operation and settlement data, Boise project, Idaho

Item	1920	1921	1922	1923	1924
Acreage to which bureau was prepared to furnish water.....	¹ 274, 379	¹ 282, 831	¹ 283, 411	¹ 283, 471	¹ 283, 580
Acreage irrigated.....	² 131, 760	² 153, 000	² 155, 000	² 155, 500	² ³ 156, 000
Miles of canal operated.....	1, 000	1, 016	1, 056	1, 019	1, 019
Water diverted (acre-feet).....	853, 810	844, 195	748, 570	895, 705	444, 593
Water delivered to land per acre of land irrigated (acre-feet).....	3. 00	3. 67	3. 46	3. 70	1. 77
Total number of farms on project.....	4, 000	4, 085	4, 998	5, 000	4, 900
Population.....	16, 000	16, 340	14, 700	14, 650	14, 000
Number of irrigated farms.....	3, 260	3, 300	3, 559	3, 600	3, 500
Operated by owners or managers.....	2, 417	2, 440	2, 896	2, 988	2, 153
Operated by tenants.....	843	860	663	612	1, 347
Population.....	11, 176	11, 550	14, 236	10, 800	10, 800
Number of towns.....	10	8	8	8	⁴ 10
Population.....	36, 400	36, 170	36, 170	36, 270	36, 660
Total population in towns and on farms.....	52, 400	52, 510	50, 870	50, 920	50, 660
Number of public schools.....	24	28	28	28	⁵ 48
Number of churches.....	56	56	56	58	58
Number of banks.....	17	16	16	14	13
Total capital stock.....	\$1, 850, 000	\$2, 741, 000	\$2, 741, 000	\$1, 750, 000	\$1, 390, 000
Amount of deposits.....	\$20, 600, 000	\$16, 326, 000	\$16, 707, 000	\$15, 295, 000	\$17, 639, 000
Number of depositors.....	⁶ 32, 000	⁶ 30, 000	⁶ 30, 000	⁶ 30, 000	⁶ 31, 000

¹ Including partial service to vested water-right land under Warren Act; project proper, 144,200 acres in 1924.

² Acreage served with full water supply.

³ 113,630 acres covered by crop census, including some Warren Act land.

⁴ Includes towns in and adjacent to the project.

⁵ Includes schools in and adjacent to the project that use rural school busses.

⁶ Estimated; some banks refuse to give number of depositors.

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$1, 045, 344. 62
Disbursements.....	\$546, 341. 58	
Liabilities outstanding.....	101, 408. 49	
		647, 750. 07
Unencumbered balance June 30, 1925.....		397, 594. 55
Fiscal year 1926: Amount specified in appropriation acts.....		550, 000. 00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$17, 770, 915. 78	\$50, 228. 93	\$206, 859. 95	\$18, 028, 004. 66
Less collections.....	5, 245, 178. 68			5, 245, 178. 68
Net investment June 30, 1925.....	12, 525, 737. 10	50, 228. 93	206, 859. 95	12, 782, 825. 98

Construction account

	Fiscal year 1925	To June 30, 1925	
Cost of irrigation works:			
Original construction	\$202, 495. 11	\$13, 885, 723. 08	
Value of works taken over		29, 812. 50	
Total construction cost	202, 495. 11	13, 915, 535. 58	
Operation and maintenance prior to public notice (net)		422, 192. 62	
Operation and maintenance deficits and arrearages to be repaid with construction	9, 698. 31	9, 698. 31	
Less construction revenues	12, 724. 77		\$14, 347, 426. 51
Total to be repaid by water users	199, 468. 65		207, 305. 80
Contracted repayments, water-right contracts:			
Individuals	11, 266. 07		
Warren Act			7, 516, 786. 12
Irrigation districts	1 40. 74		28, 779. 17
Total ¹	11, 306. 81		6, 921, 814. 61
			14, 467, 379. 90

¹ Contra.*Operation and maintenance accounts*

REGULAR

	Calendar year, 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost	\$165, 269. 07	\$1, 903, 115. 95	\$186, 031. 39	\$2, 013, 457. 39
Operation and maintenance returns:				
Contracted	170, 302. 72	1, 913, 615. 26	166, 899. 67	1, 921, 217. 53
Penalties	18, 177. 84	43, 998. 51	32, 280. 38	59, 487. 33
Discounts (contra)	1, 843. 29	44, 886. 34	1, 220. 44	45, 315. 85
Miscellaneous revenues	8, 456. 41	122, 426. 67	7, 910. 02	123, 469. 30
Subtotals	195, 093. 68	2, 035, 154. 10	205, 869. 63	2, 058, 858. 31
Other credits: Operation and maintenance arrearages to be repaid with construction			9, 698. 31	9, 698. 31
Total	195, 093. 68	2, 035, 154. 10	215, 567. 94	2, 068, 556. 62
Results: Excess	29, 824. 61	132, 038. 15	29, 536. 55	55, 099. 23

DRAINAGE

Operation and maintenance cost	\$145, 629. 29	\$332, 222. 08	\$82, 399. 93	\$392, 222. 20
Operation and maintenance returns:				
Contracted	138, 102. 69	549, 491. 48	138, 491. 94	618, 827. 21
Penalties	14, 137. 95	25, 339. 80	7, 343. 41	31, 889. 77
Discounts (contra)	1, 040. 32	4, 853. 44	1, 108. 77	5, 402. 79
Total	151, 200. 32	569, 977. 84	144, 726. 58	645, 314. 19
Results: Excess	5, 571. 03	237, 755. 76	62, 326. 65	253, 091. 99

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year, 1925	To June 30, 1925	Fiscal year, 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$674, 171.98	\$3, 082, 724. 64	\$226, 621. 13	\$1, 834, 744. 00	-----	\$25, 092. 00	\$1, 222, 888. 64
Charges paid in advance.....	-----	-----	1 749. 90	7, 059. 80	-----	-----	-----
Construction re-funds.....	-----	-----	-----	567. 77	-----	-----	-----
Operation and maintenance (regular):							
Water-right charges, project lands (96,776.08 acres).....	95, 538. 66	1, 219, 600. 32	30, 911. 66	844, 001. 01	\$1, 024. 23	27, 685. 99	347, 913. 32
Warren Act (379.07 approximate acres).....	1, 055. 50	4, 011. 44	726. 62	2, 850. 08	3. 34	3. 34	1, 158. 02
Irrigation districts (68,303.59 approximate acres).....	70, 305. 51	697, 605. 77	19, 023. 61	566, 634. 69	192. 87	17, 626. 52	113, 344. 56
Total.....	166, 899. 67	1, 921, 217. 53	50, 661. 89	1, 413, 485. 78	1, 220. 44	45, 315. 85	462, 415. 90
Penalties and interest.....	32, 280. 38	59, 487. 33	2, 158. 31	29, 365. 26	-----	-----	30, 122. 07
Charges paid in advance.....	-----	-----	1. 19	-----	-----	-----	-----
Operation and maintenance re-funds.....	-----	-----	-----	393. 79	-----	-----	-----
Operation and maintenance (drainage):							
Water-right charges, project lands (96,776.08 acres).....	93, 119. 27	419, 619. 42	58, 586. 71	276, 137. 33	1, 004. 20	5, 048. 85	138, 433. 24
Rental lands (5,598.50 approximate acres).....	5, 484. 13	19, 183. 36	3, 518. 32	11, 479. 13	104. 57	353. 94	7, 250. 29
Irrigation districts (68,303.59 approximate acres).....	39, 888. 54	180, 024. 43	13, 715. 42	93, 862. 50	-----	-----	86, 161. 93
Total.....	138, 491. 94	618, 827. 21	75, 820. 45	381, 578. 96	1, 108. 77	5, 402. 79	231, 845. 46
Penalties and interest.....	7, 343. 41	31, 889. 77	7, 343. 41	31, 889. 77	-----	-----	-----
Operation and maintenance re-funds.....	-----	-----	-----	36. 08	-----	-----	-----
Charges paid in advance.....	-----	-----	1 10. 60	-----	-----	-----	-----
Miscellaneous:							
Rentals of irrigation water.....	7, 910. 02	762, 203. 77	7, 271. 44	738, 279. 05	-----	4, 720. 50	19, 204. 22
Rentals power and light.....	11, 000. 00	139, 169. 91	-----	96, 424. 61	11, 000. 00	42, 745. 30	-----
Rentals grazing and farming lands.....	882. 80	21, 551. 00	281. 50	20, 861. 00	-----	-----	690. 00
Construction penalties and interest.....	69, 427. 66	114, 357. 41	17, 947. 37	62, 877. 12	-----	-----	51, 480. 29
Other.....	-----	-----	9, 515. 03	627, 615. 69	-----	-----	9, 746. 15
Grand total collections.....	-----	-----	396, 859. 84	5, 245, 178. 68	-----	-----	-----

1 Contra.
 NOTE.—Uncollected construction water-right charges as of June 30, 1925, 39.7 per cent of total accruals.
 Uncollected regular operation and maintenance charges as of June 30, 1925, 24.1 per cent of total accruals.
 Uncollected operation and maintenance (drainage) charges as of June 30, 1925, 37.5 per cent of total accruals

IDAHO, KING HILL PROJECT

The King Hill project is located in the counties of Elmore, Twin Falls, Owyhee, and Gooding. The average elevation above sea level is 2,750 feet. During the past 12 years the average annual rainfall was 8.59 inches, the average maximum temperature 107°, and the average minimum temperature 4° F. The soil ranges from light to heavy sandy loam with some heavy clay. With an irrigation season of 193 days, the project produces principally alfalfa, alfalfa seed, potatoes, grains, fruits in favorable seasons, and stock.

Operation and settlement data, King Hill project

Item	1920	1921	1922	1923	1924
Acreage for which the bureau was prepared to supply water.....	11,340	13,648	13,648	16,890	16,890
Acreage irrigated.....	4,780	5,908	6,440	7,017	6,240
Miles of canal operated.....	83.2	83.5	91.3	100.1	100.1
Water diverted (acre-feet).....	43,660	56,153	61,326	91,834	104,536
Water delivered to land (acre-feet).....	22,420	30,028	35,875	41,933	53,984
Per acre of land irrigated (acre-feet).....	4.69	5.08	5.57	5.97	8.65
Total number of farms on project.....	225	260	260	260	263
Population.....	424	557	599	598	655
Total irrigated farms.....	125	160	175	184	188
Operated by owners or managers.....	110	141	131	124	117
Operated by tenants.....	15	19	44	60	71
Number of towns.....	4	4	4	4	4
Population.....	1,572	1,685	2,052	1,525	1,818
Total population of towns and farms.....	1,996	2,242	2,651	2,123	2,473
Number of public schools.....	5	6	6	6	6
Number of churches.....	5	5	5	5	5
Number of banks.....	2	2	1	1	1
Total capital stock.....	\$30,000	\$30,000	\$20,000	\$20,000	\$20,000
Amount of deposits.....	\$418,548	\$319,036	\$275,000	\$290,000	\$286,315
Number of depositors.....	1,060	824	800	1,000	950

¹ 19 farm owners farming rented lands in connection with their own farms.

Appropriations

Fiscal year 1925:

Congressional authorizations.....	\$60,134.61
Disbursements.....	\$41,249.49
Liabilities outstanding.....	2,417.59
	43,667.08

Unencumbered balance, June 30, 1925.....

16,467.53

Fiscal year 1926: Amount specified in appropriation acts.....

35,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$1,982,086.74	\$103,478.48	\$2,085,565.22
Less collections.....	127,823.26		127,823.26
Net investment, June 30, 1925.....	1,854,263.48	103,478.48	1,957,741.96

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction.....	\$12,718.66	\$1,904,898.80
Operation and maintenance prior to public notice (net).....	¹ 8,533.43	
Less:		
Contributed funds.....	8,025.66	8,025.66
Construction revenues.....	5,095.51	18,002.41
		26,028.07
Total to be repaid by water users.....	¹ 8,935.94	1,878,870.73
Contracted repayments: Contract, King Hill irrigation district.....		2,000,000.00

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$29,348.61	\$115,012.05	\$34,512.59	\$133,923.64
Operation and maintenance returns:				
Contracted.....	33,784.21	123,672.20	30,606.97	124,951.23
Discounts (contra).....		1,519.05		1,519.05
Total.....	33,784.21	122,153.15	30,606.97	123,432.18
Results:				
Excess.....	4,435.60	7,141.10		
Deficit.....			3,905.62	10,491.46

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$40,000.00	\$40,000.00					\$40,000.00
Contributed funds.....			\$8,025.66	\$8,025.66			
Operation and maintenance:							
King Hill irrigation district (16,887.81 approximate acres).....	¹ 124,951.23	124,951.23	¹ 59,032.07	59,032.07	¹ \$1,519.05	\$1,519.05	64,400.11
Miscellaneous:							
Rentals of irrigation water.....	² 88,368.94		² 50,515.83				
Penalties and interest.....	¹ 476.99	476.99	¹ 476.99	476.99			
Other.....			² 2,492.44	60,288.64			67.80
Grand total collections.....			14,526.45	127,823.26			

¹ Part transferred from water rentals. Actual accruals for year, \$30,606.97; actual collections, \$4,059.97; no other credits during year.

² Contra.

³ Transferred to operation and maintenance.

⁴ Part transferred from water rentals. Actual accruals and collections for year, \$243.28.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 100 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 51.5 per cent of total accruals.

IDAHO, MINIDOKA PROJECT

The Minidoka project is located in Minidoka and Cassia Counties, Idaho. Jackson Lake Reservoir is in Lincoln County, Wyo. The irrigation season is from April 1 to October 15 (198 days); average rainfall for 20 years, 11.9 inches; average of maximum and minimum temperatures for the past 20 years, 99.4° and -14.2° F. The principal products are alfalfa, wheat, oats, barley, clover seed, sugar beets, potatoes, and livestock.

Operation and settlement data, Minidoka project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	121,557	121,557	121,562	121,570	121,570
Acreage irrigated.....	107,650	107,230	105,580	104,470	99,200
Miles of canal operated.....	634.60	634.60	634.60	634.60	634.60
Water diverted (acre-feet).....	734,428	697,815	711,050	706,889	633,320
Water delivered to land (acre-feet).....	383,766	99,363	¹ 107,573	¹ 112,380	¹ 107,653
Per acre of land irrigated (acre-feet).....	3.6	¹ 2.13	¹ 2.38	¹ 2.49	¹ 2.48
Total number of farms on project.....	2,420	2,454	2,451	2,453	2,453
Population.....	9,250	8,848	8,301	7,571	7,197
Number of irrigated farms.....	2,420	2,454	2,451	2,382	2,288
Operated by owners.....	1,863	1,987	1,868	1,758	1,278
Operated by tenants.....	557	467	583	624	1,010
Population.....	9,250	8,848	8,301	7,571	7,197
Number of towns.....	6	6	6	6	6
Population.....	9,000	8,445	8,170	7,070	6,920
Total population, towns and farms.....	18,250	17,293	16,471	14,641	14,117
Number of public schools.....	26	22	22	22	23
Number of churches.....	29	29	29	29	30
Number of banks.....	10	³ 6	³ 5	³ 4	5
Total capital stock.....	\$345,000	³ \$190,000	³ \$180,000	³ \$210,000	\$200,000
Amount of deposits.....	\$3,860,744	³ \$1,140,000	³ \$1,100,000	³ \$1,250,000	\$1,400,000
Number of depositors.....	12,725	5,900	5,000	6,000	4,000

¹ South side pumping division only; data from gravity division not available.

² Partially estimated.

³ Exclusive of banks that failed.

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$510,213.05
Disbursements.....	\$154,548.58
Liabilities outstanding.....	23,708.37
	178,256.95
Unencumbered balance June 30, 1925.....	331,956.10
Fiscal year 1926: Amount specified in appropriation acts.....	170,000.00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$8,851,934.46	\$15,550.90	\$119,746.94	\$8,987,232.30
Less collections.....	5,606,707.19			5,606,707.19
Net investment, June 30, 1925.....	3,245,227.27	15,550.90	119,746.94	3,380,525.11

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$22,966.57	\$5,646,253.53
Supplemental construction.....		749,429.74
Value of works taken over.....		211,782.66
Total construction cost.....	22,966.57	\$6,607,465.93
Operation and maintenance prior to public notice (net).....	¹ 415.39	155,047.30
Operation and maintenance deficits and arrearages to be repaid with construction.....	8,316.26	20,630.12
		6,783,143.35
Less:		
Contributed funds.....		799,250.96
Construction revenues.....	70,477.67	632,038.21
Total to be repaid by water users.....	¹ 39,610.23	5,351,854.18
Contracted repayments; water-right contracts:		
Individuals.....	2,401.77	5,607,508.90
Warren Act.....		429,412.50
Total.....	2,401.77	6,036,921.40

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$117,887.42	\$1,663,569.10	\$118,290.32	\$1,721,468.38
Operation and maintenance returns:				
Contracted.....	117,433.07	1,619,416.30	98,754.70	1,639,073.45
Penalties.....	2,590.24	27,354.67	702.57	27,759.29
Discounts (contra).....	958.89	20,179.49	1,278.96	20,566.49
Miscellaneous revenues.....	169.26	98,697.31	169.26	98,697.31
Subtotal.....	119,233.68	1,725,288.79	98,347.57	1,744,963.56
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....		12,313.86	8,316.26	20,630.12
Total.....	119,233.68	1,737,602.65	106,663.83	1,765,593.68
Results:				
Excess.....	1,346.26	74,033.55		44,125.30
Deficit.....			11,626.49	

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June, 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$329,554.92	\$2,712,714.76	\$125,496.64	\$1,971,727.31	\$11.07	\$154,434.31	\$586,553.14
Contributed funds		799,250.96		799,250.96			
Total	329,554.92	3,511,965.72	125,496.64	2,770,978.27	11.07	154,434.31	586,553.14
Charges paid in advance			12.68	2,054.03			
Construction refunds				3,163.72			
Operation and maintenance:							
Water-right charges, project lands (48,095.95 acres)	278,257.19	953,171.40	35,761.76	699,211.05	1,278.96	19,821.69	234,138.66
Warren Act lands, (626,840 acres)	15,960.00	146,134.13	13,269.64	143,432.43	2,697.48	2,697.48	4.22
Irrigation districts, (71,652.42 acres)	22,515.64	520,012.32	12,637.83	458,762.57		51,371.94	9,877.81
Total	116,732.83	1,619,317.85	61,669.23	1,301,406.05	3,976.44	73,891.11	244,020.69
Penalties and interest	702.57	27,759.29	702.57	27,655.68		103.61	
Charges paid in advance			146.03	1,665.25			
Operation and maintenance refunds				8,699.21			
Miscellaneous:							
Rentals of irrigation water	584.65	272,607.98	716.32	269,373.75		3,234.23	
Rentals power and light	108,243.87	907,290.66	105,489.47	876,309.74	2,455.74	7,274.16	23,706.76
Rentals, grazing and farming lands	766.69	35,138.85	826.06	31,033.99			4,104.86
Construction forfeitures			301.95	9,647.98			
Construction penalties and interest	4,055.29	66,518.78	4,055.29	66,518.78			
Other			20,362.31	238,200.74			93.60
Grand total collections			319,571.13	5,606,707.19			

¹ Contra.² Actual accruals for the year ----- \$85,880.40

Net relief deductions ----- 7,623.21

Net accruals ----- 78,257.19

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 16.7 per cent of total accruals.
Uncollected operation and maintenance charges as of June 30, 1925, 15 per cent of total accruals.

AMERICAN FALLS RESERVOIR

Appropriations

Fiscal year 1925:			
Congressional authorizations.....			\$3, 275, 300. 63
Disbursements.....	\$1, 372, 669. 85		
Liabilities outstanding.....	443, 219. 17		
			1, 815, 889. 02
Unencumbered balance, June 30, 1925.....			1, 459, 411. 61
Fiscal year 1926: Amount specified in appropriation acts.....			627, 000. 00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$3, 824, 496. 98	\$4, 495. 80	\$3, 828, 992. 78
Less collections.....	2, 723, 657. 02		2, 723, 657. 02
Net investment, June 30, 1925.....	1, 100, 839. 96	4, 495. 80	1, 105, 335. 76

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction.....	\$1, 662, 630. 45	\$3, 777, 462. 02
Less construction revenues.....	¹ 11, 038. 17	¹ 191, 314. 03
Total to be repaid by water users.....	1, 673, 668. 62	3, 968, 776. 05
Contracted repayments: Water-right contracts (Warren Act).....	¹ 1, 215, 144. 00	3, 347, 638. 00

¹ Contra.*Status of current accounts receivable as of June 30, 1925*

	Due		Collected		Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		
			Fiscal year 1925	To June 30, 1925	
Construction:					
Water-right charges.....	\$2, 005, 684. 25	\$2, 039, 291. 25	\$1, 536, 620. 91	\$1, 570, 227. 91	\$469, 063. 34
Charges paid in advance.....			527, 128. 82	902, 128. 82	
Miscellaneous:					
Construction forfeitures.....	12, 782. 00	12, 782. 00	12, 782. 00	12, 782. 00	
Construction penalties and interest.....	105, 574. 90	105, 574. 90	71, 609. 69	71, 609. 69	33, 965. 21
Other.....			64, 681. 94	166, 908. 60	5, 349. 37
Grand total collections.....			2, 212, 823. 36	2, 723, 657. 02	

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 23 per cent of total accruals.

MONTANA, HUNTLEY PROJECT

The Huntley project is located in the south central part of Montana, Yellowstone County. The soils consist of heavy clays and light sandy loams, lying at an average elevation of about 3,000 feet above sea level. The average annual rainfall is 12 to 13 inches.

Operation and settlement data, Huntley project

Item	1920	1921	1922	1923	1924
Acres for which bureau was prepared to deliver water.....	32,085	31,964	32,000	32,000	32,540
Acres irrigated.....	20,020	18,800	19,523	18,780	19,600
Miles of canal operated.....	229	229	229	229	229
Water diverted (acre-feet).....	79,079	79,186	72,245	72,893	72,893
Water delivered to land (acre-feet).....	24,250	26,814	18,768	20,296	24,717
Per acre of land irrigated (acre-feet).....	1.21	1.42	0.96	1.01	1.26
Total number of farms on project.....	691	691	690	596	617
Number of irrigated farms.....	603	578	590	547	557
Operated by owners or managers.....	320	377	387	269	215
Operated by tenants.....	283	201	203	278	342
Population.....	1,883	1,861	1,682	1,015	1,822
Number of towns.....	8	8	8	8	8
Population.....	664	673	673	530	530
Total populations in towns and on farms.....	2,547	2,534	2,355	1,545	2,352
Number of public schools.....	8	8	8	8	8
Number of churches.....	6	7	7	9	9
Number of banks.....	4	4	2	2	2
Total capital stock.....	\$95,000	\$95,000	\$50,000	\$50,000	\$50,000
Amount of deposits.....	\$588,362	\$402,282	\$156,000	\$155,000	\$192,180
Number of depositors.....	1,711	1,475	810	800	750

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$142,737.66
Disbursements.....	\$27,035.79
Liabilities outstanding.....	2,904.31
	29,940.10
Unencumbered balance June 30, 1925.....	112,797.56
Fiscal year 1926: Amount specified in appropriation acts.....	118,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$2,451,990.05	\$31,698.25	\$2,483,688.30
Less collections.....	880,586.10		880,586.10
Net investment June 30, 1925.....	1,571,403.95	31,698.25	1,603,102.20

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$84.21	\$1,125,030.67
Supplemental construction.....		373,736.05
Total construction cost.....	84.21	1,498,766.72
Operation and maintenance prior to public notice (net).....	188.31	1809.90
Operation and maintenance deficits and arrearages to be repaid with construction.....	9,766.26	10,980.90
Less:		\$1,508,937.72
Contributed funds.....		717.64
Construction revenues.....	227.98	16,500.46
		17,218.10
Total to be repaid by water users.....	9,434.18	1,491,719.62
Contracted repayments: Water-right contracts (individuals).....	25,958.56	1,340,448.71

Operation and maintenance account

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost	\$36, 035. 14	\$911, 501. 99	\$36, 300. 45	\$927, 319. 18
Operation and maintenance returns:				
Contracted.....	25, 386. 03	491, 029. 45	26, 019. 59	490, 325. 04
Penalties.....	2, 284. 02	10, 917. 85	1, 781. 91	11, 994. 26
Discounts (contra).....	1, 037. 38	8, 707. 87	979. 15	8, 737. 94
Miscellaneous revenues.....	436. 70	8, 929. 56	444. 06	9, 450. 27
Subtotals.....	27, 069. 37	502, 168. 99	27, 266. 41	503, 031. 63
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....	9, 766. 26	10, 980. 90	9, 766. 26	10, 980. 90
Total.....	36, 835. 63	513, 149. 89	37, 032. 67	514, 012. 53
Results:				
Excess.....	800. 49		732. 22	
Deficit.....		398, 352. 10		413, 306. 65

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncol- lected, June 30 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$31, 377. 69	\$448, 307. 90	\$18, 580. 32	\$395, 247. 54		\$502. 21	\$52, 558. 15
Contributed funds.....		717. 64		717. 64			
Total.....	31, 377. 69	449, 025. 54	18, 580. 32	395, 965. 18		502. 21	52, 558. 15
Charges paid in advance.....			¹ 217. 10	336. 39			
Construction refunds.....				969. 75			
Operation and maintenance:							
Water-right charges, project lands (28,184.94 acres).....	35, 785. 85	490, 325. 04	30, 572. 87	382, 384. 18	\$979. 15	9, 481. 13	98, 459. 73
Penalties and interest.....	1, 781. 91	11, 994. 26	1, 781. 91	11, 818. 49		175. 77	
Charges paid in advance.....			781. 22	802. 49			
Operation and maintenance refunds.....				96. 97			
Miscellaneous:							
Rentals of irrigation water.....	540. 72	7, 777. 45	606. 95	7, 377. 59			399. 86
Rentals, grazing and farming lands.....	953. 56	13, 627. 78	902. 93	13, 146. 06			481. 72
Construction forfeitures.....			813. 96	10, 174. 85			
Construction penalties and interest.....	1, 366. 58	5, 508. 73	1, 366. 58	5, 508. 73			
Other.....			486. 99	52, 005. 42			55. 30
Grand total collections.....			55, 676. 63	880, 586. 10			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 11.7 per cent of total accruals.
Uncollected operation and maintenance charges as of June 30, 1925, 20.1 per cent of total accruals.

MONTANA, MILK RIVER PROJECT

The Milk River project is located on the Great Northern Railway in north-eastern Montana, about 50 miles south of the Canadian boundary, and extending from the mouth of the Milk River (which is about 120 miles west of the North Dakota line) westward for about 150 miles to and beyond Chinook. The average elevation is about 2,200 feet; the soil grades from loam through finer textured loam or clay to a soil known locally as gumbo. The average annual rainfall is about 13.24 inches; the ordinary maximum summer and minimum winter temperatures are about 100° and -40° F., respectively.

Operation and settlement data, Milk River project

Item	1920	1921	1922	1923	1924
Acreage for which bureau is prepared to supply water:					
Malta and Glasgow divisions.....	68,600	¹ 66,373	66,500	¹ 64,800	64,800
Chinook division.....	25,300	27,727	30,000	32,500	43,000
Acreage irrigated.....	24,330	42,400	46,370	41,900	² 40,500
Miles of canal operated, exclusive of Chinook division.....	361	276	284	282	312
Water diverted (acre-feet):					
For Malta and Glasgow divisions.....	80,800	54,444	75,177	67,200	80,000
For Chinook division.....	26,900	33,335	27,655	34,000	43,000
Water delivered to land, exclusive of Chinook division (acre-feet).....	10,460	6,190	6,068	6,875	7,800
Per acre of land irrigated exclusive of Chinook division (acre-feet).....	0.58	0.54	0.51	0.50	0.61
Total number of farms on project.....	³ 466	³ 364	³ 298	⁴ 680	⁴ 657
Population.....	⁴ 867	⁴ 816	⁴ 1,057	⁴ 1,839	⁴ 1,961
Number of irrigated farms.....	230	178	209	211	171
Operated by owners or managers.....	208	134	130	146	92
Operated by tenants.....	22	44	79	65	79
Population.....	763	484	651	506	743
Number of towns.....	⁴ 15	⁴ 15	⁴ 15	⁴ 15	⁴ 15
Population.....	⁴ 7,796	⁴ 7,170	⁴ 7,100	⁴ 7,675	⁴ 7,025
Total population on farms and towns.....	⁴ 8,663	⁴ 7,986	⁴ 8,157	⁴ 9,514	⁴ 8,993
Number of public schools.....	⁴ 38	⁴ 38	⁴ 38	⁴ 35	⁴ 24
Number of churches.....	⁴ 25	⁴ 25	⁴ 25	⁴ 30	⁴ 35
Number of banks.....	⁴ 25	⁴ 24	⁴ 23	⁴ 20	⁴ 17
Total capital stock.....	⁴ \$765,000	⁴ \$825,000	⁴ \$843,000	⁴ \$709,500	⁴ \$875,000
Amount of deposits ⁵	⁴ \$4,500,000	⁴ \$3,562,000	⁴ \$4,350,000	⁴ \$3,736,600	⁴ \$5,036,000
Number of depositors ⁵	⁴ 14,000	⁴ 12,500	⁴ 12,000	⁴ 9,900	⁴ 10,300

¹ Reduction due to better data on irrigable area.

² Includes irrigated area in the Chinook division and land in the Malta and Glasgow divisions irrigated wholly or in part from flood-water systems; project proper, 14,600 acres.

³ Exclusive of Chinook division.

⁴ Includes Chinook division.

⁵ Deposits received from large area not in project.

Appropriations

Fiscal year 1925:

Congressional authorizations.....	\$323,825.76
Disbursements.....	\$63,583.55
Liabilities outstanding.....	142,303.68
	<u>205,887.23</u>

Unencumbered balance, June 30, 1925.....

Fiscal year 1926: Amount specified in appropriation acts..... 117,938.53

76,000.00

Voucher transactions

	Reclamation fund	Judgments of court of claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$7,310,541.52	\$2,674.64	\$98,095.17	\$7,411,311.33
Less collections.....	415,191.93			415,191.93
Net investment, June 30, 1925.....	6,895,349.59	2,674.64	98,095.17	6,996,119.46

Construction account

	Fiscal year 1925	To June 30, 1925.
Cost of irrigation works: Original construction.....	\$102, 143. 25	\$6, 680, 760. 99
Operation and maintenance prior to public notice (net).....	34, 707. 42	423, 680. 59
Less: Construction revenues.....	1, 579. 17	\$7, 104, 441. 58 ¹ 63, 220. 88
Total to be repaid by water users.....	135, 271. 70	7, 041, 220. 70

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Charges paid in advance.....		\$1, 114. 00		\$1, 114. 00			
Miscellaneous:							
Rentals of irrigation water.....	\$18, 026. 23	\$210, 085. 89	\$19, 212. 72	\$191, 374. 35	\$159. 10	\$1, 174. 78	\$17, 536. 76
Rentals, grazing and farming lands.....	3, 813. 89	34, 728. 23	3, 813. 89	34, 304. 58		38. 88	384. 77
Other.....			6, 890. 22	188, 399. 00			12. 26
Grand total collections...			29, 916. 83	415, 191. 93			

MONTANA, SUN RIVER PROJECT

The Sun River project is located in Cascade, Chouteau, Lewis and Clark, and Teton Counties, lying to the north and west of Great Falls, Mont. The average elevation of the irrigable area is about 3,700 feet above sea level; the soil is loam, clay, and alluvium. The average annual rainfall is 10.9 inches; the average annual temperatures are: Maximum, 96° F.; minimum, -33° F.; mean, 44° F. The length of the irrigation season is from May 1 to October 10 (163 days); the principal crops are hay, grain, vegetables, livestock, and dairy products. The principal markets are Great Falls, St. Paul, Minneapolis, Chicago, and Seattle.

Operation and settlement data, Fort Shaw and Greenfields divisions, Sun River project

Item	1919	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	40, 057	40, 057	40, 057	42, 465	42, 470	1 57, 160
Acreage irrigated.....	11, 496	14, 870	21, 750	20, 537	9, 090	21, 630
Miles of canal operated.....	244	250	267	267	267	386
Water diverted (acre-feet).....	42, 863	75, 595	88, 258	64, 683	44, 709	80, 089
Water delivered to land (acre-feet).....	24, 080	21, 653	30, 300	24, 200	13, 208	31, 145
Per acre of land irrigated (acre-feet).....	1. 9	1. 47	1. 39	1. 17	1. 31	1. 44
Total number of farms on project.....	212	500	500	500	500	763
Population.....	542	1, 000	1, 000	1, 000	1, 000	1, 112
Number of irrigated farms.....	199	354	373	388	294	441
Operated by owners or managers.....	151	264	285	273	200	266
Operated by tenants.....	48	90	88	115	94	175
Population.....	542	861	949	978	817	1, 059
Number of towns.....	8	8	4	4	4	4
Population.....	155	685	378	401	354	397
Total population in towns and on farms.....	697	1, 685	1, 378	1, 401	1, 354	1, 509
Number of public schools.....	4	17	17	17	17	17
Number of churches.....	4	11	11	11	11	11
Number of banks.....	1	2 5	2 3	2 3	2 3	2 3
Total capital stock.....	\$20, 000	\$110, 000	\$65, 000	\$71, 500	\$65, 000	\$66, 400
Amount of deposits.....	\$110, 000	\$391, 121	\$150, 000	\$158, 000	\$212, 000	\$147, 000
Number of depositors.....	400	2 1, 278	780	740	650	585

¹ Increase due to bringing under irrigation of part 2, Greenfields division.² Applies to whole project rather than to the two divisions named.

Appropriations

Fiscal year 1925:

Congressional ¹ authorizations	\$172,457.60
Disbursements	\$81,985.43
Liabilities outstanding	5,552.10

Unencumbered balance June 30, 1925..... 87,537.53
 Fiscal year 1926: Amount specified in appropriation acts..... 84,920.07
 611,000.00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers	\$4,858,014.02	\$1,585.35	\$69,158.27	\$4,928,757.64
Less collections	509,702.94			509,702.94
Net investment June 30, 1925.....	4,348,311.08	1,585.35	69,158.27	4,419,054.70

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction	\$48,756.69	\$4,388,769.78
Operation and maintenance prior to public notice (net)	16,538.95	131,313.56
Operation and maintenance deficits and arrearages to be repaid with construction	13,855.09	16,373.99
		\$4,536,457.33
Less:		
Contributed funds		274.69
Construction revenues	¹ 504.63	39,074.93
		39,349.62
Toal to be repaid by water users	79,655.36	4,497,107.71
Contracted repayments: Water-right contracts (individuals)	12,472.09	422,423.13

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost	\$9,770.22	\$218,120.67	\$10,883.99	\$225,612.66
Operation and maintenance returns:				
Contracted	¹ 3,019.80	170,418.86	¹ 2,287.40	170,414.46
Penalties	905.69	3,469.28	2,456.19	5,433.11
Discounts (contra)	184.91	3,192.24	186.94	3,217.70
Miscellaneous revenues	165.51	2,479.34	187.91	2,504.62
Subtotals	¹ 2,233.51	173,175.24	169.76	175,134.49
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction	13,855.09	16,373.99	13,855.09	16,373.99
Total	11,621.58	189,549.23	14,024.85	191,508.48
Results:				
Excess	1,951.36		3,140.86	
Deficit		28,571.44		34,104.18

¹ Contra.

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$13, 752. 23	\$180, 330. 34	\$7, 723. 27	\$156, 095. 54	\$211. 46	\$425. 09	\$23, 809. 71
Contributed funds.....		274. 69	115. 92	158. 77			115. 92
Total.....	13, 752. 23	180, 605. 03	7, 607. 35	156, 254. 31	211. 46	425. 09	23, 925. 63
Charges paid in advance.....				29, 176. 06			
Construction refunds.....				3, 034. 70			
Operation and maintenance:							
Water-right charges, project lands (13,902.01 acres).....	11, 567. 69	170, 414. 46	7, 909. 57	139, 786. 60	247. 96	3, 493. 51	27, 134. 35
Penalties and interest.....	2, 456. 19	5, 433. 11	2, 128. 97	5, 040. 93	59. 42	124. 38	267. 80
Charges paid in advance.....				10. 55			
Operation and maintenance refunds.....				126. 91			
Miscellaneous:							
Rentals of irrigation water....	19, 284. 57	71, 838. 74	16, 886. 32	42, 758. 55	381. 56	921. 30	28, 158. 89
Rentals grazing and farming lands.....	3, 304. 27	37, 429. 10	3, 519. 58	34, 333. 68			3, 095. 42
Construction forfeitures.....			156. 00	4, 603. 05			
Construction penalties and interest.....	2, 246. 87	4, 289. 80	2, 066. 15	4, 109. 08	12. 21	12. 21	168. 51
Other.....			3, 512. 59	90, 468. 52			324. 84
Grand total collections.....			43, 786. 53	509, 702. 94			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 13.2 per cent to total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 15.9 per cent of total accruals.

MONTANA-NORTH DAKOTA, LOWER YELLOWSTONE PROJECT

The Lower Yellowstone project is situated on the west side of the Yellowstone River in eastern Montana and western North Dakota. The length of the irrigation season depends upon the amount of precipitation in the spring. May 1 to October 10 (163 days) is the maximum period of water deliveries. The average elevation is 1,900 feet above sea level. The average number of days between the last killing frost in the spring and the first in the fall is 129. Since 1905 the average annual rainfall has been about 14.4 inches. The average of the highest temperature is 103° F., and the average lowest —35° F. Some alkali and gumbo are found in scattering low tracts, but the project as a whole has a deep sandy loam soil. The principal crops are alfalfa, grain, sugar beets, seed peas, potatoes, and corn. Billings, Mont., has been the market for sugar beets; Duluth and Minneapolis, Minn., for grain; Chicago and the South for potatoes.

Operation and settlement data, Lower Yellowstone project

Item	1920 ¹	1921 ¹	1922 ¹	1923 ¹	1924 ¹
Acreage for which bureau was prepared to supply water.....	² 40, 200	² 40, 344	² 40, 200	² 58, 000	² 58, 000
Acreage irrigated.....	19, 120	19, 980	15, 599	17, 859	14, 030
Miles of canal operated.....	187	174	213	268	226
Water diverted (acre-feet).....	47, 375	64, 972	49, 280	89, 290	81, 070
Water delivered to land (acre-feet).....	16, 633	25, 733	18, 411	22, 459	17, 757
Per acre of land irrigated (acre-feet).....	0. 87	1. 28	1. 17	1. 26	1. 26
Total number of farms on project.....	543	572	575	686	686
Population.....	1, 368	1, 390	1, 591	1, 265	1, 567
Number of irrigated farms.....	375	370	370	373	390
Irrigated farms operated by owners and managers.....	265	223	236	231	235
Irrigated farms operated by tenants.....	110	147	134	142	155
Number of towns.....	8	8	8	8	8
Population.....	2, 850	2, 805	2, 805	2, 415	2, 560
Total population in towns and on farms.....	4, 218	4, 195	4, 396	3, 680	4, 127
Number of public schools.....	12	12	13	13	16
Number of churches.....	15	15	15	15	15
Number of banks.....	10	9	7	4	6
Total capital stock.....	\$330, 000	\$335, 000	\$200, 000	\$100, 000	\$150, 000
Amount of deposits.....	\$2, 331, 000	\$1, 851, 000	\$1, 425, 000	\$308, 645	\$880, 120
Number of depositors.....	6, 500	4, 726	4, 475	1, 850	2, 778

¹ Project operated under contracts with irrigation districts.² District lands only.

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$95,485.35
Disbursements.....	\$62,985.49	
Liabilities outstanding.....	5,904.13	
		68,889.62
Unencumbered balance June 30, 1925.....		26,595.73
Fiscal year 1926: Amount specified in appropriation acts.....		180,000.00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$4,154,433.16	\$40,119.25	\$30,908.55	\$4,225,460.96
Less collections.....	342,504.95			342,504.95
Net investment, June 30, 1925.....	3,811,928.21	40,119.25	30,908.55	3,882,956.01

Construction account

	Fiscal year, 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$969.63	\$3,089,220.39
Supplemental construction.....		77,306.38
Total construction cost.....	969.63	3,166,526.77
Operation and maintenance prior to public notice (net) ¹	185.32	1554.18
Operation and maintenance deficits and arrearages to be repaid with construction.....		522,500.05
Less construction revenue.....	1,112.34	
Total to be repaid by water users.....	1328.03	\$3,688,472.64
Contracted repayments:		
Contracts, Lower Yellowstone irrigation districts Nos. 1 and 2.....		3,588,421.41
Water-right contracts (special).....		25,880.40
Total.....		3,614,301.81

¹ Contra.*Operation and maintenance account*

	Calendar year, 1924	To Dec. 31, 1924	Fiscal year, 1925	To June 30, 1925
Operation and maintenance cost.....	\$70,132.82	\$970,835.01	\$79,391.21	\$1,013,561.80
Operation and maintenance returns:				
Contracted.....	69,779.74	323,340.30	69,779.74	323,340.30
Penalties.....		2.59		2.59
Discounts (contra).....		4.63		4.63
Miscellaneous revenue.....	353.08	124,996.70	442.43	125,094.20
Subtotals.....	70,132.82	448,334.96	70,222.17	448,432.46
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....		522,500.05		522,500.05
Total.....	70,132.82	970,835.01	70,222.17	970,932.51
Results: Deficit.....			9,169.04	42,629.29

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Un- collected June 30, 1925
			Cash		Other credits		
	Fiscal year, 1925	To June 30, 1925	Fiscal year, 1925	To June 30, 1925	Fiscal year, 1925	To June 30, 1925	
Construction: Water-right charges	\$32, 635. 48	\$102, 057. 96	\$2, 987. 10	\$50, 863. 32			\$51, 194. 64
Operation and maintenance:							
Water-right charges, irriga- tion districts (58,248 acres)	47, 441. 34	291, 266. 59	1, 797. 24	52, 733. 72		\$4. 63	238, 528. 24
Penalties and interest		2. 59		2. 59			
Operation and maintenance refunds				190. 56			
Miscellaneous:							
Rentals of irrigation water	262. 50	123, 850. 49	377. 47	122, 445. 73			1, 404. 76
Rentals farming and grazing lands	168. 68	3, 277. 63	273. 68	3, 277. 63			
Penalties and interest	13, 497. 11	38, 578. 71	13, 497. 11	38, 578. 71			
Other			1, 488. 68	74, 412. 69			653. 75
Grand total collections			20, 421. 28	342, 504. 95			

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 50.2 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 81.9 per cent of total accruals.

NEBRASKA-WYOMING, NORTH PLATTE PROJECT

The North Platte project is situated in western Nebraska and eastern Wyoming. The character of the soil varies from sandy loam on the major portion of the Interstate and Northport division to gumbo soil on portions of the Fort Laramie division. The principal products are alfalfa, cereals, corn, sugar beets, and potatoes; and the principal markets are Omaha, Nebr., Kansas City and St. Joseph, Mo., Denver, Colo., and central Wyoming. The length of the irrigation season is from April 1 to September 30 and the average rainfall amounts to 14.55 inches. The average temperature ranges between 99° maximum and -21° minimum, F.

Operation and settlement data, Interstate division, North Platte project

Item	1920	1921	¹ 1922	¹ 1923	¹ 1924
Acreage for which bureau was prepared to supply water	² 129, 629	² 129, 666	113, 436	113, 490	114, 633
Acreage irrigated	² 97, 640	² 97, 400	87, 300	87, 404	85, 850
Miles of canal operated	807	809	805	802	810
Water delivered to land (acre-feet)	³ 175, 153	³ 186, 328	222, 509	155, 600	222, 720
Per acre of land irrigated (acre-feet)	³ 1. 99	³ 2. 14	2. 55	1. 78	2. 72
Total number of farms on project ⁴	1, 410	1, 450	1, 458	1, 458	1, 458
Population	5, 000	5, 700	5, 300	5, 300	5, 000
Number of irrigated farms	1, 300	1, 340	1, 340	1, 307	1, 325
Operated by owners or managers	800	710	720	669	625
Operated by tenants	500	630	620	638	700
Population	4, 746	5, 200	4, 782	4, 543	4, 350
Number of towns	9	9	9	6	6
Population	14, 382	14, 400	14, 400	12, 700	12, 700
Total population of towns and farms	19, 382	20, 100	19, 700	18, 000	17, 700
Number of public schools	40	40	40	50	50
Number of churches	26	26	26	37	37
Number of banks	21	27	12	13	12
Total capital stock	\$777, 500	\$787, 500	\$475, 000	\$505, 000	\$437, 500
Amount of deposits	\$7, 371, 100	\$6, 834, 400	\$3, 957, 700	\$4, 533, 000	\$5, 174, 460
Number of depositors	12, 000	11, 200	11, 650	13, 300	12, 300

¹ All data exclusive of North Platte Canal & Colonization Co. lands.

² Includes North Platte Canal & Colonization Co. lands.

³ Exclusive of lands under North Platte Canal & Colonization Co. tract.

⁴ Statistics for items below, for years previous to 1922, include some figures for Fort Laramie and Northport divisions.

Operation and settlement data, Fort Laramie division, North Platte project

Item	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	16,232	44,091	55,500	72,000
Acreage irrigated.....	12,150	20,302	32,441	39,060
Miles of canal operated.....	138	311	402	574
Water delivered to the land (acre-feet).....	22,665	43,689	45,808	98,757
Per acre of land irrigated (acre-feet).....	1.85	2.15	1.41	2.53
Total number of farms on project ¹	407	573	717	1,334
Population.....	1,500	1,086	1,700	4,500
Number of irrigated farms.....	190	320	564	770
Operated by owners or managers.....	105	244	259	207
Operated by tenants.....	85	76	305	563
Population.....	433	650	1,411	1,575
Number of towns.....	3	11	10	10
Population.....	2,900	5,000	4,800	4,800
Total population of towns and farms.....	4,400	6,086	6,500	9,300
Number of public schools.....	10	20	38	38
Number of churches.....	1	16	18	18
Number of banks.....	2 ⁸	12	7	5
Total capital stock.....	³ \$185,000	\$285,000	\$165,000	\$95,000
Amount of deposits.....	⁴ \$1,039,600	\$1,794,900	\$1,413,000	\$1,000,110
Number of depositors.....	5,500	3,600	4,150	4,800

¹ Data for items below for years previous to 1923 estimated.² Lands on the Interstate and Fort Laramie divisions are tributary to 6 of the banks listed above.³ \$155,000 of this amount is listed under similar caption on Interstate division.⁴ \$919,600 of this amount is listed under similar caption on Interstate division.*Operation and settlement data, Northport division, North Platte project*

Item	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	4,712	16,350	16,350
Acreage irrigated.....	3,645	8,955	9,170
Miles of canal operated.....		100	106
Water delivered to the land (acre-feet).....	11,722	16,821	30,535
Per acre of land irrigated (acre-feet).....	3.02	1.88	3.33
Total number of farms on project.....	232	233	233
Population.....	800	406	700
Number of irrigated farms.....	50	148	179
Operated by owners or managers.....	19	70	57
Operated by tenants.....	31	78	122
Population.....	250	225	415
Number of towns.....	2	2	2
Population.....	1,400	1,400	1,400
Total population of towns and farms.....	2,220	1,806	2,100
Number of public schools.....	7	6	14
Number of churches.....	5	5	5
Number of banks.....	2	2	2
Total capital stock.....	\$50,000	\$50,000	\$50,000
Amount of deposits.....	\$827,000	\$843,600	\$942,000
Number of depositors.....	2,000	2,480	2,300

Appropriations

Fiscal year 1925:

Congressional authorizations.....		\$2,584,758.81
Disbursements.....	\$1,239,016.29	
Liabilities outstanding.....	126,800.00	
		1,365,816.29

Unencumbered balance June 30, 1925..... 1,218,942.52

Fiscal year 1926: Amount specified in appropriation acts..... ¹ 510,000.00¹ Plus unexpended balance of \$800,000, appropriation for Guernsey Reservoir, fiscal year 1925.

Voucher transactions

	Reclamation fund	Judgments Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$19,654,412.22	\$26,425.67	\$353,839.98	\$20,034,677.87
Less collections.....	4,345,681.53			4,345,681.53
Net investment June 30, 1925.....	15,308,730.69	26,425.67	353,839.98	15,688,996.34

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$933,910.64	\$15,449,306.21
Supplemental construction.....	301,806.74	843,600.32
Value of works taken over.....		41,441.65
Total construction cost.....	1,235,717.38	16,384,348.18
Operation and maintenance prior to public notice (net).....	84,728.68	581,286.77
Operation and maintenance deficits and arrearages to be repaid with construction.....	68,069.13	150,483.08
	1,388,515.19	\$17,116,118.03
Less:		
Contributed funds.....	13,464.40	34,598.24
Construction revenues.....	11,834.33	115,468.53
		150,066.77
Total to be repaid by water users.....	1,390,145.26	16,966,051.26
Contracted repayments, water-right contracts:		
Individuals.....	75,333.63	7,911,999.41
Warren Act.....		1,074,013.50
Irrigation districts.....	5,250,000.00	6,300,000.00
Special.....	1298.00	38,973.25
Total.....	5,325,035.63	15,324,986.16

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$205,966.32	\$2,120,374.49	\$311,046.23	\$2,322,196.51
Operation and maintenance returns:				
Contracted.....	149,292.47	2,085,970.82	218,475.66	2,196,206.15
Penalties.....	689.96	26,841.91	204.67	26,907.37
Discounts (contra).....	1,648.02	34,039.28	1,762.73	34,324.56
Miscellaneous revenues.....	1,968.48	23,703.84	1,680.80	24,891.64
Subtotals.....	150,302.89	2,102,477.29	218,598.40	2,213,680.60
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....	68,069.13	150,483.08	68,069.13	150,483.08
Total.....	218,372.02	2,252,960.37	286,667.53	2,364,163.68
Results:				
Excess.....	12,405.70	132,585.88		41,967.17
Deficit.....			24,378.70	

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	¹ \$348,647.71	\$3,126,680.69	\$55,223.27	\$1,787,869.52	\$738.41	\$35,697.27	\$1,303,113.90
Contributed funds.....	² 13,464.40	34,598.24	² 9,795.52	34,598.24	-----	-----	-----
Total.....	335,183.31	3,161,278.93	45,427.75	1,822,467.76	738.41	35,697.27	1,303,113.90
Charges paid in advance.....	-----	-----	² 6.60	529.00	-----	-----	-----
Construction re-funds.....	-----	-----	298.00	1,738.85	-----	-----	-----
Operation and maintenance:							
Water-right charges, project lands (109,012.07 acres).....	¹ 97,214.83	1,826,030.10	35,165.80	1,197,333.26	2,211.06	44,496.64	584,200.20
Warren Act lands (127,115 approximate acres).....	19,034.73	245,201.91	20,512.62	223,556.73	89.70	218.37	21,426.81
Funds advanced.....	79,303.50	79,303.50	79,303.50	79,303.50	-----	-----	-----
Irrigation districts (16,350 approximate acres).....	22,922.60	45,670.64	22,748.04	22,748.04	-----	-----	22,922.60
Total.....	218,475.66	2,196,206.15	157,729.96	1,522,941.53	2,300.76	44,715.01	628,549.61
Penalties and interest.....	204.67	26,907.37	81.37	26,179.63	123.30	727.74	-----
Charges paid in advance.....	-----	-----	142.87	171.10	-----	-----	-----
Operation and maintenance re-funds.....	-----	-----	-----	488.96	-----	-----	-----
Miscellaneous:							
Rentals of irrigation water.....	65,359.88	287,943.25	71,330.96	279,927.40	-----	10.00	8,005.85
Rentals power and light.....	39,059.29	152,923.87	31,848.33	129,108.76	5,646.41	19,902.00	3,913.11
Rentals grazing and farming lands.....	6,710.62	89,780.70	7,305.45	84,861.83	-----	-----	4,918.87
Construction forfeitures.....	-----	6,102.75	-----	6,102.75	-----	-----	-----
Construction penalties and interest.....	10,837.93	103,596.99	9,666.02	101,821.40	147.96	751.64	1,023.95
Other.....	-----	-----	90,552.33	369,342.56	-----	-----	16,104.12
Grand total collections.....	-----	-----	414,376.44	4,345,681.53	-----	-----	-----

	Construction	Operation and maintenance
¹ Actual accruals for the year.....	\$436,709.98	\$165,283.96
Deferred under the relief act of Feb. 28, 1923.....	88,062.27	68,069.13
Net accruals.....	348,647.71	97,214.83

² Contra.

NOTE.—Uncollected construction on water-right charges as of June 30, 1925, 41.7 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 29.7 per cent of total accruals.

NEVADA, NEWLANDS PROJECT

The Newlands project is located on the Southern Pacific Railroad in Churchill, Storey, Lyon, and Washoe Counties, Nev. The average annual precipitation on the irrigable area, which is at an elevation of about 4,000 feet above sea level, is 4.87 inches. The principal crops are alfalfa, grain, potatoes, melons, honey, and dairy products.

Operation and settlement data, Newlands project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	69,310	72,166	73,747	73,730	72,625
Acreage irrigated.....	45,610	46,160	44,963	44,890	44,280
Miles of canal operated.....	389	393	410	411	411
Water diverted (acre-feet).....	295,225	314,241	499,508	367,929	265,660
Water delivered to land (acre-feet).....	129,814	132,788	141,972	145,653	149,560
Per acre of land irrigated (acre-feet).....	2.85	2.87	3.15	3.24	3.38
Total number of farms on project.....	785	870	906	912	917
Population.....	2,523	2,652	2,450	2,737	2,658
Number of irrigated farms.....	742	788	778	788	762
Operated by owners or managers.....	677	708	681	681	670
Operated by tenants.....	65	80	97	107	92
Population.....	2,523	2,652	2,450	2,737	2,668
Number of towns.....	5	5	5	5	5
Population.....	2,830	2,500	2,500	2,500	2,300
Total population, towns, and on farms.....	5,353	5,152	4,950	5,237	4,968
Number of public schools.....	12	11	11	11	11
Number of churches.....	8	8	8	8	9
Number of banks.....	2	1	1	1	1
Capital stock.....	\$115,000	\$75,000	\$75,000	\$75,000	\$75,000
Amount of deposits.....	\$864,360	\$677,104	\$680,700	\$800,000	\$851,639
Number of depositors.....	2,500	2,000	1,700	1,600	1,700

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$515,757.26
Disbursements.....	\$188,244.18
Liabilities outstanding.....	13,211.20
	201,455.38
Unencumbered balance June 30, 1925.....	314,301.88
Fiscal year 1926: Amount specified in appropriation acts.....	667,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$9,065,613.99	\$90,440.32	\$9,156,054.31
Less collections.....	1,929,711.85		1,929,711.85
Net investment June 30, 1925.....	7,135,902.14	90,440.32	7,226,342.46

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$52,945.85	\$6,716,613.18
Supplemental construction.....		753,955.72
Value of works taken over.....		37,082.61
Total construction cost.....	52,945.85	7,507,651.51
Operation and maintenance prior to public notice (net).....	1 185.60	1 1,540.11
Operation and maintenance deficits and arrearages to be repaid with construction.....	2,134.43	4,157.36
		\$7,510,268.76
Less: Construction revenues.....	3,370.07	175,505.80
Total to be repaid by water users.....	51,524.61	7,334,762.96
Contracted repayments:		
Water-right contracts (individuals).....	1 123,628.09	1,841,027.44
Contract, Truckee-Carson irrigation district.....	75,511.32	699,305.80
Totals.....	1 48,116.77	2,540,333.24

1 Contra.

Operation and maintenance account

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$187,337.13	\$1,285,224.83	\$148,527.03	\$1,331,907.33
Operation and maintenance returns:				
Contracted.....	183,170.94	1,194,706.08	157,040.19	1,168,364.21
Penalties.....	3,591.62	16,562.00	5,768.08	21,213.72
Discounts (contra).....	2,407.10	20,251.48	2,366.69	20,260.06
Miscellaneous revenues.....	480.90	19,348.87	4,850.90	23,976.87
Subtotals.....	184,836.36	1,210,365.47	165,292.48	1,193,294.74
Other credits: Operation and maintenance deficit and arrearages to be repaid with construction.....	2,134.43	4,157.36	2,134.43	4,157.36
Total.....	186,970.79	1,214,522.83	167,426.91	1,197,452.10
Results:				
Excess.....			18,899.88	
Deficit.....	366.34	70,702.00		134,455.23

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal 1925	To June 31, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	¹ \$44,903.31	\$637,095.28	\$31,912.59	\$577,074.70	\$1,016.92	\$7,805.82	\$52,214.76
Charges paid in advance.....			3,521.98	4,909.05			
Construction refunds				384.55			
Operation and maintenance:							
Water-right charges, project lands (65,040 acres)	² 109,605.48	1,023,295.07	98,142.62	874,791.42	3,745.82	32,023.37	116,480.28
Penalties and interest.....	5,768.08	21,213.72	5,598.43	20,369.25	136.91	811.73	32.74
Charges paid in advance.....			³ 311.09	294.31	³ 60.16		
Operation and maintenance refunds				111.96			
Miscellaneous:							
Rentals of irrigation water.....	5,036.50	24,397.77	659.00	18,217.92	4,415.00	6,176.85	3.00
Rentals, power and light.....	13,610.94	216,448.31	13,593.35	189,752.42		25,505.75	1,190.14
Rentals, grazing and and farming lands.....	5,824.42	35,450.82	4,544.54	32,254.44			3,196.38
Construction forfeitures.....			3,770.00	8,595.60			
Construction penalties and interest	2,360.45	9,712.00	2,344.55	9,696.10			15.90
Other.....			4,576.56	193,260.13			246.86
Grand total collections.....			168,352.53	1,929,711.85			

¹ Actual construction accruals for fiscal year..... \$63,677.67
Less deductions due to cancellations, relinquishments, permanent reduction
of area, and credit of \$8 per acre on part of \$60 lands..... 18,774.36

Net accruals..... 44,903.31

² Actual operation and maintenance accruals for fiscal year..... \$118,683.84
Less deductions due to cancellations and relinquishments..... 9,078.36

Net accruals..... 109,605.48

³ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 8.2 per cent of total accruals.
Uncollected operation and maintenance charges as of June 30, 1925, 11.4 per cent of total accruals.

NEW MEXICO, CARLSBAD PROJECT

The Carlsbad project is located in Eddy County, N. Mex. The length of the irrigation season is 260 days, which includes two weeks in winter. The average elevation of the irrigable area is 3,100 feet. The rainfall averages 14.2 inches. The average of recorded temperatures for a period of 23 years ranges from 112° to -7° F. The soil of the irrigable area is Pecos clay and sandy loam, with high lime content. The principal products are cotton, alfalfa, and miscellaneous grains and fruits. The principal markets are Carlsbad, Kansas City, Chicago, New Orleans, and Galveston.

Operation and settlement data, Carlsbad project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	25,000	25,000	25,000	25,000	25,045
Acreage irrigated.....	22,170	23,810	24,076	24,060	24,460
Miles of canal operated.....	45	45	45	45	45
Water diverted (acre-feet).....	131,673	137,500	116,700	120,200	133,300
Water delivered to land (acre-feet).....	53,644	59,371	56,687	57,256	66,384
Per acre of land irrigated (acre-feet).....	2.42	2.49	2.36	2.38	2.71
Total number of farms on project.....	¹ 770	¹ 769	¹ 796	¹ 808	¹ 824
Population.....	1,575	1,435	1,580	2,128	2,060
Number of irrigated farms.....	363	426	333	388	412
Operated by owners or managers.....	² 189	² 277	² 184	188	169
Operated by tenants.....	³ 267	149	149	200	243
Population.....	1,575	1,435	1,580	2,128	2,060
Number of towns.....	4	4	4	4	4
Population.....	3,375	3,375	3,440	3,440	3,440
Total population in towns and on farms.....	4,950	4,810	5,020	5,568	5,500
Number of public schools.....	13	13	10	12	8
Number of churches.....	11	11	12	12	12
Number of banks.....	5	3	3	1	2
Total capital stock.....	\$275,000	\$225,000	\$225,000	\$25,000	\$85,000
Amount of deposits.....	\$1,049,924	\$1,176,441	\$1,106,300	\$100,000	\$525,000
Number of depositors.....	2,617	2,350	2,374	⁴ 300	1,350

¹ Water-right applications.

² Many farms were operated by one man.

³ Several tenants on one farm, also operated in part by owner.

⁴ Two bank failures January 2 and May 10, 1924.

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$66,817.16
Disbursements.....	\$41,775.74
Liabilities outstanding.....	1,832.48
	43,608.22
Unencumbered balance June 30, 1925.....	23,208.94
Fiscal year 1926: Amount specified in appropriation acts.....	70,000.00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$2,005,249.02	\$17,305.25	\$29,984.02	\$2,052,538.29
Less collections.....	1,198,485.78			1,198,485.78
Net investment June 30, 1925.....	806,763.24	17,305.25	29,984.02	854,052.51

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction.....	\$19,967.82	\$1,438,664.72
Operation and maintenance prior to public notice (net).....	¹ 1,919.13	¹ 13,624.41
Operation and maintenance arrearages to be repaid with construction.....		1,934.00
		\$1,426,974.31
Less:		
Contributed funds.....		7,980.06
Construction revenues.....	868.02	16,049.31
		24,029.37
Total to be repaid by water users.....	17,180.67	1,402,944.94
Contracted repayments: Water-right contracts (individuals).....	420.00	1,424,312.75

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$42,374.33	\$556,545.63	\$41,182.92	\$579,720.13
Operation and maintenance returns:				
Contracted.....	51,227.06	553,468.44	51,227.06	553,468.44
Penalties.....	6,973.29	23,538.90	3,497.10	24,812.17
Discounts (contra).....	1,871.82	9,187.30	1,870.15	9,619.38
Miscellaneous revenues.....	2,626.95	15,338.03	2,310.47	16,608.09
Subtotal.....	58,955.48	583,158.07	55,164.48	585,269.32
Other credits: Operation and maintenance arrearages to be repaid with construction.....		1,934.00		1,934.00
Total.....	58,955.48	585,092.07	55,164.48	587,203.32
Results, excess.....	16,581.15	28,546.44	13,981.56	7,483.19

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
			Cash		Other credits		
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$58,099.37	\$533,534.56	\$67,359.65	\$519,527.75			\$14,006.81
Contributed funds		7,980.06		7,980.06			
Total	58,099.37	541,514.62	67,359.65	527,507.81			14,006.81
Charges paid in advance			263.90	465.21			
Operation and maintenance:							
Water-right charges, project lands (25,038.6 acres)	51,227.06	553,468.44	62,605.57	532,744.90	\$1,870.15	\$9,619.38	11,104.16
Penalties and interest	3,497.10	24,812.17	3,497.10	24,812.17			
Miscellaneous:							
Rentals of irrigation water	4,164.04	26,097.05	4,164.04	26,097.05			
Rentals of grazing lands	476.18	13,642.42	361.62	12,993.42			649.00
Construction forfeitures		269.70		269.70			
Construction penalties and interest	3,520.05	27,647.18	3,520.05	27,647.18			
Other			1,426.78	45,948.34			72.65
Grand total collections			142,670.91	1,198,485.78			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 2.63 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 2.01 per cent of total accruals.

NEW MEXICO-TEXAS, RIO GRANDE PROJECT

The Rio Grande project is international and interstate, including approximately 155,000 acres of land in New Mexico and Texas, and approximately 25,000 acres in the Republic of Mexico. The average annual rainfall is 10 inches. The irrigation season normally is from February 1 to October 15.

Operation and settlement data, Rio Grande project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	109,000	109,000	116,000	124,000	142,000
Acreage irrigated.....	¹ 73,346	² 85,580	³ 89,589	⁴ 92,220	⁵ 116,000
Miles canal and drain operated.....	546	586	645	808	926
Water diverted (acre-feet).....	⁶ 677,953	⁶ 782,366	⁶ 998,725	⁶ 1,036,419	1,360,380
Water delivered to land (acre-feet).....	⁷ 226,464	⁷ 197,086	204,452	188,819	240,000
Per acre of land irrigated (acre-feet).....	2.95	2.55	2.28	2.18	2.18
Total number of farms on project.....	3,021	3,204	3,534	3,743	4,800
Population.....	12,199	11,774	11,267	15,925	28,000
Number of irrigated farms.....	3,021	3,222	3,534	3,743	4,800
Operated by owners or managers.....	2,668	2,628	2,954	3,014	3,600
Operated by tenants.....	353	594	580	729	1,200
Number of towns.....	29	29	34	42	42
Population.....	100,235	101,235	110,442	111,883	106,000
Total population in towns and on farms.....	⁸ 112,434	⁸ 113,009	⁸ 121,709	127,808	134,000
Number of public schools.....	102	103	49	73	75
Number of churches.....	105	106	110	115	120
Number of banks.....	14	13	13	9	8
Total amount of capital stock.....	\$2,990,000	\$2,950,000	\$2,950,000	\$2,675,000	\$2,000,000
Amount of deposits.....	\$30,898,499	\$28,194,815	\$30,000,000	\$27,323,442	\$26,500,000
Number of depositors.....	31,716	30,000	31,000	30,000	30,000

¹ Land irrigated by bureau distribution system only.

² Includes 1,120 acres, Fort Hancock.

³ Includes 5,369 acres in Palomas and Fort Hancock, outside project limits, irrigated under surplus stored water contract.

⁴ Project proper.

⁵ Does not include 240 acres in Palomas, and 8,964 acres in Hancock section irrigated under surplus and waste water contracts.

⁶ Total diversions, including water wasted and rediverted from river below.

⁷ Includes delivery to farms by Bureau of Reclamation operation and to heads of community ditches on project.

⁸ 5,000 soldiers included in El Paso's population.

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$866,597.76
Disbursements.....	\$735,328.92
Liabilities outstanding.....	52,491.74
	787,820.66
Unencumbered balance June 30, 1925.....	78,777.10
Fiscal year 1926: Amount specified in appropriation acts.....	650,000.00

Voucher transactions

	Reclamation fund	Rio Grande Dam	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$15,029,376.03	\$1,000,000.00	\$441,171.78	\$16,470,547.81
Less collections.....	3,062,240.67			3,062,240.67
Net investment June 30, 1925.....	11,967,135.36	1,000,000.00	441,171.78	13,408,307.14

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction	\$467, 540. 58	\$13, 802, 248. 22
Operation maintenance prior to public notice (net)	¹ 19, 751. 06	¹ 274, 936. 78
		\$13, 527, 311. 44
Less:		
Nonreimbursable Rio Grande Dam appropriation		1, 000, 000. 00
Construction revenues	1, 452. 64	37, 345. 60
		1, 037, 345. 60
Total to be repaid by water users	446, 336. 88	12, 489, 865. 84
Contracted repayments: Contracts, Elephant Butte irrigation district and El Paso water improvement district No. 1.	5, 850, 000. 00	13, 500, 000. 00

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost	\$262, 886. 81	\$904, 010. 38	\$309, 859. 14	\$1, 075, 650. 44
Operation and maintenance returns:				
Contracted	255, 774. 67	899, 701. 72	254, 332. 81	899, 701. 72
Penalties	¹ 256. 50	1, 426. 46		1, 426. 46
Discounts		4, 486. 44		4, 486. 44
Miscellaneous revenues	6, 723. 00	7, 368. 64	6, 913. 50	7, 559. 14
Total	262, 241. 17	904, 010. 38	261, 246. 31	904, 200. 88
Results, deficit	645. 64		48, 612. 83	171, 449. 56

¹ Contra.*Status of current accounts receivable as of June 30, 1925*

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$197, 330. 40	\$472, 345. 20	\$197, 330. 40	\$472, 345. 20	-----	-----	
Charges paid in advance			12, 905. 70	12, 905. 70	-----	-----	
Operation and maintenance:							
Irrigation districts (150,000 approximate acres)	211, 833. 40	809, 145. 80	211, 877. 10	797, 571. 50	-----	\$4, 486. 44	\$7, 087. 86
Penalties and interest		1, 426. 46		1, 426. 46	-----	-----	
Charges paid in advance			1 786. 12	89. 40	-----	-----	
Operation and mainte- nance refunds				333. 52	-----	-----	
Miscellaneous:							
Rentals of irrigation water	26, 515. 56	1,144,918.68	37, 399. 20	1,118,215.51	-----	-----	26, 703. 17
Rentals, power and light		2, 243. 33		2, 243. 33	-----	-----	
Rentals, grazing and farm- ing lands	160. 00	2, 111. 70	111. 50	2, 063. 20	-----	-----	48. 50
Penalties and interest	1, 680. 21	3, 553. 76	1, 680. 21	3, 553. 76	-----	-----	
Other			48, 129. 92	651, 493. 09	-----	-----	450. 13
Grand total collections			508, 647. 91	3,062,240.67	-----	-----	

¹ Contra.

NOTE.—Uncollected operation and maintenance charges as of June 30, 1925, 0.8 per cent of total accruals.

NORTH DAKOTA, WILLISTON PROJECT

(To be sold)

The Williston project is located in Williams County, N. Dak., on the Great Northern Railway and the Missouri River. The irrigation season is 80 days. The average rainfall is 13 inches; the average high temperature is 99° and the average low -37° F. The principal products are sugar beets, alfalfa, dairy cows, and hogs, corn, and potatoes.

Operation and settlement data, Williston project

Item	1920	1921	1922	1923	1924
Area for which bureau was prepared to supply water.....	7,653	7,653	7,653	7,650	7,650
Acreage irrigated.....	2,810	2,080	1,583	1,170	1,180
Miles of canal operated.....	31	35	35	35	28
Water diverted (acre-feet).....	4,000	2,383	1,942	1,423	1,759
Water delivered to land (acre-feet).....	2,684	1,624	1,352	887	1,135
Water per acre of land irrigated (acre-feet).....	0.97	0.78	0.85	0.76	.96
Total number of farms on project.....	105	105	105	144	135
Population.....	200	210	220	241	235
Number of irrigated farms.....	94	76	73	63	60
Operated by owners or managers.....	47	39	40	35	30
Operated by tenants.....	19	12	9	13	27
Operated by nonresidents.....	28	25	24	15	3
Population.....	194	200	212	224	215
Number of towns.....	2	2	2	2	2
Population.....	5,000	5,000	4,500	4,500	4,400
Total population of towns and farms.....	5,200	5,210	4,720	4,741	4,635
Number of public schools.....	6	6	6	6	7
Number of churches.....	6	7	7	7	7
Number of banks.....	3	3	2	1	2
Total capital stock.....	\$260,000	\$260,000	\$185,000	\$100,000	\$150,000
Amount of deposits.....	\$2,000,000	\$1,800,000	\$1,700,000	\$1,500,000	\$1,650,000
Number of depositors.....	5,010	3,600	3,500	3,000	3,000

¹ Does not include hired help or beet workers.

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$142,059.23
Disbursements.....	\$79,458.28
Liabilities outstanding.....	2,047.41
	81,505.69
Unencumbered balance June 30, 1925.....	60,553.54
Fiscal year 1926: Amount specified in appropriation acts.....	25,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$1,368,583.82	\$25,279.34	\$1,393,863.16
Less collections.....	517,395.87		517,395.87
Net investment, June 30, 1925.....	851,187.95	25,279.34	876,467.29

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....		\$470,798.69
Supplemental construction.....	2,072.29	30,056.47
Total construction cost.....	2,072.29	500,855.16
Operation and maintenance prior to public notice (net).....		¹ 165.00
Operation and maintenance deficits and arrearages to be repaid with construction.....		168,471.56
Less construction revenues.....	664.03	\$669,161.72
Total to be repaid by water users.....	1,408.26	10,744.83
Contracted repayments: Contract; Williston irrigation district.....		658,416.89
		489,275.30

¹ Contra.*Operation and maintenance account*

	Calendar 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$75,701.98	\$841,239.68	\$80,091.89	\$877,401.13
Operation and maintenance returns:				
Contracted.....		26,677.75	29,200.87	55,878.62
Penalties.....		1,918.76		1,918.76
Miscellaneous revenues.....	46,501.11	439,401.99	47,048.53	462,146.37
Subtotals.....	46,501.11	467,998.50	76,249.40	519,943.75
Other credits:				
Operation and maintenance deficits and arrearages to be repaid with construction.....		168,471.56		168,471.56
Operation and maintenance deficit uncollectible.....		178,667.20		178,667.20
Total.....	46,501.11	815,137.26	76,249.40	867,082.51
Results, deficit.....	29,200.87	26,102.42	3,842.49	10,318.62

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Un- collected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction charges paid in advance.....				\$8,250.63			
Operation and maintenance: *							
Irrigation districts (6,587.4 approximate acres)	\$29,200.87	\$55,878.62	\$11,535.57	38,213.32			\$17,665.30
Penalties and interest.....		1,918.76		1,918.76			
Miscellaneous:							
Rentals of irrigation water.....		2,117.28		2,117.28			
Rentals of power and light.....	46,630.48	456,566.68	46,411.48	453,091.48			3,475.20
Rentals, grazing and farming lands.....		249.98		249.98			
Construction forfeitures.....		655.32		655.32			
Other.....			1,472.20	12,899.10			81.49
Grand total collections.....			59,419.25	517,395.87			

NOTE.—Uncollected operation and maintenance charges as of June 30, 1925, 31 per cent of total accruals.

OREGON, UMATILLA PROJECT

The Umatilla project is located in Umatilla and Morrow Counties, Oreg. The average elevation of the irrigable area is 470 feet above sea level, the average rainfall for 15 years is 8.62 inches, and the length of the irrigation season will approximate 210 days. The principal products are alfalfa, fruits, vegetables, honey, and dairy products.

Operation and settlement data, Umatilla project

Item	1920	1921	1922	1923	1924
Area for which bureau was prepared to supply water	24,395	24,400	24,592	24,470	24,470
Miles of canal operated	177	177	186	188	193
Acreage irrigated	12,030	13,150	13,273	13,330	13,130
Water diverted (acre-feet)	165,534	130,872	129,187	127,504	113,816
Water delivered to land (acre-feet)	50,651	57,492	59,313	62,142	59,427
Per acre of land irrigated (acre-feet)	4.21	4.37	4.47	4.63	4.52
Total number of farms on project	1,000	1,000	1,000	1,011	1,011
Population	1,472	1,562	1,613	1,491	1,529
Number of irrigated farms	528	544	558	540	534
Operated by owners or managers	450	442	435	418	367
Operated by tenants	78	102	123	122	167
Population	1,280	1,562	1,613	1,491	1,529
Number of towns	4	4	4	4	4
Population	1,280	1,280	1,280	1,280	1,280
Total population of towns and farms	2,752	2,842	2,893	2,771	2,809
Number of public schools	6	6	6	6	6
Number of churches	9	9	9	9	9
Number of banks	1	1	1	1	1
Total capital stock	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Amount of deposits	\$217,590	\$235,367	\$300,000	\$300,000	\$290,000
Number of depositors	1,200	1,200	1,200	1,200	1,200

Appropriations

Fiscal year, 1925:		
Congressional authorizations		\$978,403.11
Disbursements	\$728,449.93	
Liabilities outstanding	69,919.29	
		798,369.22
Unencumbered balance June 30, 1925		180,033.89
Fiscal year 1926: Amount specified in appropriation act		840,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers	\$5,200,585.42	\$47,945.96	\$5,248,531.38
Less collections	962,112.92		962,112.92
Net investment June 30, 1925	4,238,472.50	47,945.96	4,286,418.46

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction	\$720,357.34	\$3,639,226.85
Supplemental construction	176,244.92	638,107.33
Total construction cost	896,602.26	4,277,334.18
Operation and maintenance deficits and arrearages to be repaid with construction		190,627.95
		\$4,467,962.13
Less:		
Contributed funds		1,000.00
Construction revenues	4,829.93	26,605.10
		27,605.10
Total to be repaid by water users	891,772.33	4,440,357.03
Contracted repayments, water-right contracts:		
Individuals		9,897.00
Warren Act	1,023,750.00	1,723,550.00
Irrigation districts		2,600,376.97
Total	1,023,750.00	4,423,823.97

Operation and maintenance account

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$34, 049. 37	\$622, 478. 67	\$31, 041. 53	\$641, 064. 56
Operation and maintenance returns:				
Contracted.....	32, 684. 10	400, 890. 49	32, 684. 10	400, 890. 49
Penalties.....	28. 13	6, 375. 70	4. 29	6, 375. 70
Discounts.....	7. 74	3, 294. 17	11. 54	3, 305. 71
Miscellaneous revenues.....	1, 735. 65	38, 244. 74	1, 148. 18	38, 774. 74
Subtotals.....	34, 440. 14	442, 216. 76	33, 825. 03	442, 735. 22
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....		190, 627. 95		190, 627. 95
Total.....	34, 440. 14	632, 844. 71	33, 825. 03	633, 363. 17
Results:				
Excess.....	390. 77	10, 366. 04	2, 783. 50	
Deficit.....				7, 701. 39

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$82, 441. 12	\$565, 223. 80	\$6, 269. 03	\$387, 677. 65	-----	-----	\$177, 546. 15
Contributed funds		1, 000. 00		1, 000. 00	-----	-----	-----
Total	82, 441. 12	566, 223. 80	6, 269. 03	388, 677. 65	-----	-----	177, 546. 15
Charges paid in advance			1 538. 38	14, 591. 57			
Construction refunds				63. 00	-----	-----	-----
Operation and maintenance:							
Water-right charges project lands (111 acres)	236. 38	2, 240. 30	120. 79	1, 701. 08	\$6. 34	\$108. 97	430. 25
Warren Act lands (25,120 approximate acres)	134. 00	745. 45	175. 30	686. 24	5. 20	29. 21	30. 00
Irrigation districts (24,356 approximate acres)	40, 449. 83	360, 218. 19	27, 149. 61	308, 927. 93	-----	3, 167. 53	48, 122. 73
Total	40, 820. 21	363, 203. 94	27, 445. 70	311, 315. 25	11. 54	3, 305. 71	48, 582. 98
Penalties and interest	4. 29	6, 375. 70	4. 29	6, 375. 70			
Charges paid in advance				390. 00			
Operation and maintenance refunds				9. 55			
Miscellaneous:							
Rentals of irrigation water ..	837. 50	34, 145. 54	837. 50	34, 145. 54			
Rentals grazing and farm- ing lands	439. 20	2, 540. 75	266. 20	2, 317. 75			223. 00
Construction forfeitures				6, 701. 14			
Construction penalties and interest	10, 414. 48	28, 174. 08	10, 414. 48	28, 174. 08			
Other			7, 061. 31	169, 351. 69			1, 293. 57
Grand total collections			51, 760. 13	962, 112. 92	-----	-----	-----

¹ Contra.

NOTE.—Uncollected construction water right charges as of June 30, 1925, 31.4 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 13.4 per cent of total accruals.

OREGON-CALIFORNIA, KLAMATH PROJECT

The Klamath project is located in southern Oregon and northern California. The average elevation of the irrigable lands is about 4,100 feet above sea level. The principal agricultural products are alfalfa and grain; stock raising is practiced to a large extent; the dairying industry, begun several years ago, is increasing rapidly. The principal markets are Portland, Oreg., and Sacramento and San Francisco, Calif. The irrigation season usually begins about May 1, and ends on September 30.

Operation and settlement data, Klamath project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	50,000	51,000	51,000	54,100	¹ 53,900
Acreage irrigated.....	44,800	44,883	44,929	² 46,624	³ 47,300
Miles of canal operated.....	225	225	225	277	277
Water diverted (acre-feet).....	114,179	106,104	119,830	124,137	168,980
Water delivered (acre-feet).....	49,754	48,713	49,862	56,619	69,100
Per acre of land (acre-feet).....	1.11	1.11	1.11	1.21	1.46
Total number of farms on project.....	570	570	570	600	600
Population.....	2,050	2,200	2,200	2,600	2,600
Number of irrigated farms.....	542	542	542	580	600
Operated by owners or managers.....	352	430	430	450	470
Operated by tenants.....	190	112	112	130	130
Population.....	1,650	1,720	1,720	1,800	1,800
Number of towns.....	5	5	5	5	5
Population.....	5,500	5,800	6,200	7,000	7,000
Total population, towns and farms.....	7,550	8,000	8,400	9,600	9,600
Number of public schools.....	21	22	22	24	24
Number of churches.....	10	10	10	11	13
Number of banks.....	6	5	5	5	5
Total capital stock.....	\$595,000	\$545,000	\$255,000	\$350,000	\$355,000
Amount of deposits.....	\$4,500,000	\$3,500,000	\$3,500,000	\$4,200,000	\$4,000,000
Number of depositors.....	9,250	8,000	8,000	8,200	8,200

¹ Project proper, 42,590 acres.² Includes 9,700 acres of Van Brimmer lands and in miscellaneous pumping districts.³ Includes 8,900 acres of Van Brimmer lands and in miscellaneous pumping districts; project proper, 38,400.*Appropriation*

Fiscal year 1925:	
Congressional authorizations.....	\$685,864.41
Disbursements.....	\$354,882.27
Liabilities outstanding.....	48,345.31
	403,227.58
Unencumbered balance June 30, 1925.....	282,636.83
Fiscal year 1926: Amount specified in appropriation acts.....	561,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$5,868,159.20	\$72,790.02	\$5,940,949.22
Less collections.....	1,562,548.85		1,562,548.85
Net investment June 30, 1925.....	4,305,610.35	72,790.02	4,378,400.37

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$607,568.48	\$4,521,860.81
Supplemental construction.....		545,873.53
Value of works taken over.....		6,705.07
Total construction cost.....	607,568.48	5,074,439.41
Operation and maintenance prior to public notice (net).....	¹ 3,369.34	58,782.93
Operation and maintenance deficits and arrearages to be repaid with construction.....		3,712.03
		\$5,136,934.37
Less construction revenues.....	23,679.98	201,123.39
Total to be repaid by water users.....	580,519.16	4,935,810.98
Contracted repayments, water-right contracts:		
Individuals.....	¹ 1,788.50	260,702.70
Warren Act.....	747.50	458,728.74
Irrigation districts.....	30,400.00	3,020,776.76
Special.....		254,508.40
Total.....	29,350.00	3,994,716.60

¹ Contra.

Operation and maintenance account

	Calendar year 1924	To Dec. 31 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost-----	\$67,978.08	\$686,586.36	\$73,871.60	\$731,662.90
Operation and maintenance returns:				
Contracted-----	57,068.20	675,100.65	59,453.51	675,085.65
Penalties-----	87.81	2,817.88	334.20	3,103.71
Discounts (contra)-----	132.54	4,645.96	108.31	4,645.96
Miscellaneous revenues-----	427.89	12,831.90	1,239.88	13,043.84
Subtotals-----	57,451.36	686,104.47	60,919.28	686,587.24
Other credits: Operation and maintenance, deficits and arrearages to be repaid with construction-----		3,712.03		3,712.03
Total-----	57,451.36	689,816.50	60,919.28	690,299.27
Results:				
Excess-----		3,230.14		
Deficit-----	10,526.72		12,952.32	41,363.63

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$70,283.48	\$692,692.51	\$71,189.26	\$661,344.95			\$31,347.56
Charges paid in advance.....			14,824.99	223.58			
Construction refunds.....				2,467.65			
Operation and maintenance:							
Water-right charges, project lands (individual contracts 3,471.6 acres).....	5,270.67	21,097.65	4,639.82	17,383.84	\$108.31	\$422.95	3,290.86
Warren Act lands (9,834.8 approximate acres).....	741.29	3,588.44	678.51	3,319.15			269.29
Irrigation districts (41, 485.9 approximate acres).....	58,383.03	588,678.79	53,297.06	527,141.05		29,816.96	31,720.78
Total.....	64,394.99	613,364.88	58,615.39	547,844.04	108.31	30,239.91	35,280.93
Penalties and interest.....	334.20	3,103.71	334.20	3,103.71			
Charges paid in advance.....			127.44	42.75			
Operation and maintenance refunds.....				60.75			
Miscellaneous:							
Rentals of irrigation water.....	8,724.08	52,705.39	8,788.46	52,580.89			124.50
Rentals power and light.....		7,697.18		7,697.18			
Rentals grazing and farming lands.....	24,984.30	201,749.45	25,520.30	201,665.45		84.00	
Construction forfeitures.....			42.50	5,088.40			
Penalties and interest.....			1,033.76	5,663.29			
Other.....			9,829.33	74,766.21			1,857.17
Grand total collections.....			170,500.77	1,562,548.85			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 4.5 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 5.8 per cent of totals accruals.

SOUTH DAKOTA, BELLE FOURCHE PROJECT

The Belle Fourche project is located in western South Dakota, a little north and east of the Black Hills. The climate is semiarid, with an average annual rainfall of about 14 inches; the temperatures range from -38° to 105° F. The character of the soils varies from light sandy loam to heavy clay, the clay soils predominating. The principal products are alfalfa, wheat, oats, corn, potatoes, sugar beets, garden truck, and livestock, the chief markets for which are Omaha, Minneapolis, and Chicago.

Operation and settlement data, Belle Fourche project

Item	1920	1921	1922	1923	1924
Acreage for which bureau is prepared to supply water.....	82,430	83,328	82,190	81,900	81,870
Acreage irrigated.....	59,850	55,100	31,150	30,550	48,400
Miles of canal operated.....	615	615	615	506	455
Water diverted (acre-feet) from Belle Fourche River.....	101,113	86,791	115,629	99,176	101,915
Water delivered to farms (acre-feet).....	36,616	71,715	28,421	22,290	57,923
Per acre of land irrigated (acre-feet).....	0.61	1.3	1.09	0.73	1.20
Total number of farms on project.....	1,292	1,292	1,292	1,292	1,183
Population.....	2,700	2,700	2,700	2,500	2,020
Number of irrigated farms.....	1,024	1,033	¹ 1,035	² 1,035	³ 854
Operated by owners or managers.....	692	451	833	772	272
Operated by tenants.....	332	582	116	188	485
Population.....	2,650	2,510	2,213	2,035	2,020
Number of towns.....	5	5	5	5	5
Population.....	2,350	2,386	2,386	2,350	2,350
Total population in towns and on farms....	5,050	5,086	5,086	4,850	4,370
Number of public schools.....	26	24	24	25	27
Number of churches.....	9	9	9	9	9
Number of banks.....	9	9	9	6	4
Total capital stock.....	\$250,000	\$250,000	\$250,000	\$150,000	\$135,000
Amount of deposits.....	\$2,657,621	\$2,373,380	\$2,606,200	\$2,145,000	\$2,125,000
Number of depositors.....	6,560	-----	6,500	⁴ 5,000	6,000

¹ 86 farms not operated.² 75 farms not operated.³ 97 farms not operated.⁴ Estimated.*Appropriations*

Fiscal year 1925:		
Congressional authorizations.....	-----	\$200,794.56
Disbursements.....	-----	\$63,752.14
Liabilities outstanding.....	-----	7,512.94
		71,265.08
Unencumbered balance June 30, 1925.....	-----	129,529.48
Fiscal year 1926: Amount specified in appropriation acts.....	-----	165,000.00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$4,657,266.68	\$37,170.22	\$50,273.32	\$4,744,710.22
Less collections.....	1,096,289.80	-----	-----	1,096,289.80
Net investment June 30, 1925.....	3,560,976.88	37,170.22	50,273.32	3,648,420.42

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....		\$3, 531, 454. 53
Supplemental construction.....		34, 669. 88
Total construction cost.....		3, 566, 124. 41
Operation and maintenance prior to public notice (net).....		¹ 1, 989. 03
Operation and maintenance deficits and arrearages to be repaid with construction.....		506, 436. 99
Less construction revenues.....		\$4, 070, 572. 37
		16, 565. 35
Total to be repaid by water users.....		4, 054, 007. 02
Contracted repayments: Contract, Belle Fourche irrigation district.....		4, 345, 277. 42

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$73, 533. 43	\$1, 088, 283. 37	\$79, 246. 27	\$1, 123, 452. 16
Operation and maintenance returns:				
Contracted.....	75, 000. 00	638, 721. 89	75, 000. 00	638, 721. 89
Penalties.....		31, 955. 32	¹ 430. 25	31, 955. 32
Discounts (contra).....		9, 241. 55		9, 241. 55
Miscellaneous revenues.....	1, 786. 24	12, 477. 44	2, 358. 96	13, 826. 89
Subtotals.....	76, 786. 24	673, 913. 10	76, 928. 71	675, 262. 55
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....		506, 436. 99		506, 436. 99
Total.....	76, 786. 24	1, 180, 350. 09	76, 928. 71	1, 181, 699. 54
Results:				
Excess.....	3, 252. 81	92, 066. 72		58, 247. 38
Deficit.....			2, 317. 56	

¹ Contra.*Status of current accounts receivable as of June 30, 1925*

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$199, 428. 26	\$659, 294. 96	\$45, 999. 89	\$471, 758. 05	-----	\$266. 57	\$187, 270. 34
Charges paid in advance.....			¹ 45, 999. 89	8, 962. 94	-----		
Construction refunds.....				423. 42	-----		
Operation and maintenance:							
Water-right charges, ir- rigation district, (76- 370 approximate acres).....	76, 285. 48	601, 858. 31	22, 771. 80	483, 342. 32	-----	9, 376. 82	109, 139. 17
Penalties and interest.....	¹ 430. 25	31, 955. 32	1, 478. 87	17, 824. 29	¹ \$1,699.29	12, 390. 61	1, 740. 42
Charges paid in advance.....			¹ 22,771. 80	31, 520. 77	-----		
Operation and mainte- nance refunds.....				384. 97	-----		
Miscellaneous:							
Rentals of irrigation water.....	636. 07	6, 000. 89	636. 07	5, 833. 09	-----	17. 80	150. 00
Rentals, grazing and farming lands.....	345. 17	987. 11	247. 57	885. 51	-----		101. 60
Construction forfeitures.....				1, 116. 10	-----		
Penalties and interest.....	7, 404. 64	28, 344. 75	7, 006. 15	22, 170. 69	-----	339. 66	5, 834. 40
Other.....			2, 449. 39	52, 067. 65	-----		60. 62
Grand total collections.....	-----	-----	11, 818. 05	1, 096, 289. 80	-----		-----

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 28.3 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 18.1 per cent of total accruals.

UTAH, STRAWBERRY VALLEY PROJECT

The Strawberry Valley project is located in the north central part of Utah; the irrigable area lies along the southeastern shore of Utah Lake, in Utah County, and the storage works, in Wasatch County, 30 miles east of Springville. The length of the irrigation season is 169 days, from April 15 to September 30. The average elevation of the project lands is about 4,600 feet above sea level. The average rainfall at Payson for a period of 16 years is $18\frac{1}{2}$ inches, most of which occurs from September 1 to May 1. The climate is temperate, varying from 0° to 95° F. The last killing frost in the spring usually occurs prior to May 10, and the first in the fall after October 1. The soil varies from sandy loam to heavy clay and varying mixtures of both, with black alluvium and loam in the bottom lands. The mesa lands are sandy loam underlain with gravel so that natural drainage is excellent. The principal crops are wheat, oats, barley, millet, alfalfa, timothy, sugar beets, potatoes, corn, cane, apples, plums, pears, peaches, prunes, apricots, cherries, melons, and all kinds of vegetables. Sugar beets, cereals, and hay constitute the staple crops.

Operation and settlement data, Strawberry Valley project

Item	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water.....	50,000	53,889	53,889	53,890	53,890
Acreage irrigated.....	¹ 45,450	¹ 47,446	¹ 47,446	¹ 47,460	¹ 47,560
Miles of canal operated.....	9.3	9.3	9.3	9.3	9.3
Water diverted (acre-feet).....	69,100	83,000	79,500	83,800	² 113,750
Water delivered to land (acre-feet).....	57,900	71,200	73,401	79,674	106,203
Per acre of land irrigated (acre-feet).....	1.27	1.50	1.55	1.68	2.23
Total number of farms on project.....	3,000	3,200	3,200	3,113	3,113
Population.....	7,000	7,000	7,000	7,000	7,000
Number of irrigated farms.....	2,700	2,740	2,741	2,741	2,741
Operated by owners or managers.....	2,200	2,340	2,291	2,291	2,300
Operated by tenants.....	500	400	450	450	441
Population.....	6,500	6,500	6,500	6,500	6,500
Number of towns.....	12	12	12	12	12
Population.....	16,000	16,000	16,000	16,000	16,200
Total population of towns and farms.....	23,000	23,000	23,000	23,000	23,200
Number of public schools.....	22	22	22	23	24
Number of churches.....	23	23	25	25	26
Number of banks.....	6	6	6	³ 4	5
Total capital stock.....	\$285,000	\$285,000	\$285,000	\$210,000	\$235,000
Amount of deposits.....	\$2,180,000	\$1,750,000	\$1,900,000	⁴ \$1,429,354	\$1,500,000
Number of depositors.....	9,830	10,000	10,000	⁴ 7,000	7,250

¹ Project proper, 34,290 acres; reported under crop census, 43,320 acres.

² 36,000 acre-feet of water distributed free and rented for irrigation purposes for replanting and to make up water shortages due to low natural run-off.

³ Two bank failures during the year.

⁴ Figures do not include two banks closed during 1923.

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$105,817.09
Disbursements.....		\$42,251.24
Liabilities outstanding.....		3,165.25
Unencumbered balance to June 30, 1925.....		45,416.49
Fiscal year 1926: Amount specified in appropriation acts.....		60,400.60
		39,000.00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$4,236,685.74	\$440.00	\$34,682.99	\$4,271,808.73
Less collections.....	1,452,243.58			1,452,243.58
Net investment June 30, 1925.....	1,784,442.16	440.00	34,682.99	2,819,565.15

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works: Original construction.....	\$8,401.22	\$3,499,638.80
Operation and maintenance prior to public notice (net).....		12,111.90
Operation and maintenance deficits and arrearages to be repaid with construction.....	1,346.33	1,346.33
Less construction revenues.....	8,540.79	\$3,513,097.03
		53,315.79
Total to be repaid by water users.....	1,206.76	3,459,781.24
Contracted repayments, water-right contracts:		
Individuals.....	12,161.26	2,453,886.96
Warren Act.....		83,700.00
Irrigation districts.....		460,650.00
Special.....		105,180.00
Total.....	12,161.26	3,103,416.96

Operation and maintenance account

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$23,694.58	\$396,971.96	\$21,115.59	\$406,653.99
Operation and maintenance returns:				
Contracted.....	13,965.67	385,231.29	14,685.67	384,866.29
Penalties.....	2,783.46	6,255.67	2,514.42	6,433.26
Discounts (contra).....	1,000.27	10,280.16	997.56	10,570.41
Miscellaneous revenues.....	6,400.61	17,083.43	6,236.66	17,358.26
Subtotals.....	22,149.47	398,290.23	22,439.19	398,087.40
Other credits: Operation and maintenance deficits and arrearsages to be repaid with construction.....	1,346.33	1,346.33	1,346.33	1,346.33
Total.....	23,495.80	399,636.56	23,785.52	399,433.73
Results:				
Excess.....		2,664.60	2,669.93	
Deficit.....	198.78			7,220.26

Status of current accounts receivable, June 30, 1925

	Due		Collected				Uncol- lected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges.....	\$155,419.90	\$765,319.27	\$76,841.57	\$556,638.18			\$208,681.09
Charges paid in advance.....			10.71				
Operation and maintenance:							
Water-right charges project lands (32,053.10 acres).....	33,410.56	307,153.17	17,295.23	246,223.78	\$635.35	\$9,148.08	51,781.31
Warren Act lands (5,575.65 approximate acres).....	1,876.44	14,366.04	1,521.73	12,813.02	74.96	488.77	1,064.25
Irrigation districts (10,000 approximate acres).....	5,745.00	38,736.25	5,457.75	37,802.69	287.25	933.56	
Total.....	41,032.00	360,255.46	24,274.71	296,839.49	997.56	10,570.41	52,845.56
Penalties and interest.....	2,514.42	6,433.26	1,799.51	5,718.35			714.91
Charges paid in advance.....			2.77	1.59			
Operation and maintenance refunds.....				36.48			
Miscellaneous:							
Rentals of irrigation water	5,734.90	14,298.54	5,734.90	14,298.54			
Rentals, power and light	25,823.45	177,333.10	23,237.01	173,198.73			4,134.37
Rentals, grazing, and farm- ing lands.....	15,470.70	166,751.06	15,470.70	166,751.06			
Construction forfeitures			258.75	278.75			
Construction penalties and interest.....	9,460.09	19,206.33	8,030.04	17,776.28			1,430.05
Other.....			8,050.36	220,706.13			63.43
Grand total collections.....			163,684.07	1,452,243.58			

¹ Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 27.3 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 14.7 per cent of total accruals.

WASHINGTON, OKANOGAN PROJECT

The Okanogan project is located in Okanogan County, Wash. The length of the irrigation season is 153 days, from May 1 to September 30. The average elevation of the project is 1,000 feet above sea level; the average rainfall is about 11.5 inches; the temperature ranges from 108° to -10° F. The soil is volcanic ash and gravel on the upper benches, and sand and gravel on the lowlands along the Okanogan River. The principal crop of the project is apples, with some peaches, pears, small fruits, hay, and vegetables. The principal markets are the States east.

Operation and settlement data, Okanogan project

Item	1920	1921	1922	1923	1924
Acreage for which the bureau was prepared to supply water.....	8,200	8,200	7,676	7,600	7,500
Acreage irrigated.....	5,436	5,644	5,569	5,162	4,940
Miles of canal operated.....	66	67	69	69	70
Water diverted (acre-feet) ¹	8,435	21,886	21,318	20,488	13,584
Water delivered to land (acre-feet).....	5,259	16,631	15,295	13,634	8,882
Per acre of land irrigated (acre-feet).....	0.96	2.95	2.75	2.64	1.80
Total number of farms on project.....	594	594	473	510	510
Population.....	1,137	1,220	1,363	1,430	1,261
Number of irrigated farms.....	1,390	439	447	458	453
Operated by owners or managers.....	1,340	388	390	399	404
Operated by tenants.....	50	51	57	59	49
Population.....	1,137	1,220	1,363	1,430	1,261
Number of towns.....	3	3	3	3	3
Population.....	1,885	2,150	2,300	2,600	3,000
Total population in towns and on farms.....	3,022	3,370	3,663	4,030	4,261
Number of public schools.....	5	6	6	7	7
Number of churches.....	8	8	8	8	9
Number of banks.....	5	5	5	5	4
Total capital stock.....	\$155,000	\$155,000	\$155,000	\$155,000	\$140,000
Amount of deposits.....	\$1,050,100	\$1,043,000	\$956,000	\$1,000,000	\$1,226,000
Number of depositors.....	2,100	2,200	2,250	2,350	2,400

¹ Corrected since last report.

Appropriations

Fiscal year 1925:	
Congressional authorizations.....	\$84,892.81
Disbursements.....	\$70,485.25
Liabilities outstanding.....	8,572.97
	79,058.22
Unencumbered balance June 30, 1925.....	5,834.59
Fiscal year 1926: Amount specified in appropriations acts.....	70,000.00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$1,912,228.42	\$47,767.18	\$1,959,995.60
Less collections.....	499,670.10		499,670.10
Net investment June 30, 1925.....	1,412,558.32	47,767.18	1,460,325.50

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....		\$841,536.61
Supplemental construction.....	\$12,023.04	620,035.07
Total construction cost.....	12,023.04	\$1,461,571.68
Operation and maintenance prior to public notice (net).....		¹ 47,766.87
Operation and maintenance deficits and arrearages to be repaid with construction.....		9,746.79
		1,423,551.60
Less construction revenues.....	189.93	5,898.63
Total to be repaid by water users.....	11,833.11	1,417,652.97
Contracted repayments:		
Water-right contracts (individuals).....		3,395.00
Contract: Okanogan irrigation district.....		1,494,445.29
		1,497,840.29

¹ Contra.

Operation and maintenance account

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$65, 112. 33	\$452, 677. 59	\$65, 898. 77	\$477, 762. 69
Operation and maintenance returns:				
Contracted.....	47, 077. 87	358, 970. 36	47, 744. 37	358, 970. 36
Penalties.....	1, 990. 87	9, 438. 24	2, 821. 22	11, 647. 32
Discounts (contra).....	6. 00	365. 03	6. 00	365. 03
Miscellaneous revenues.....	566. 45	68, 119. 83	410. 40	68, 489. 83
Subtotals.....	49, 629. 19	436, 163. 40	50, 969. 99	438, 742. 48
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....		9, 746. 79		9, 746. 79
Total.....	49, 629. 19	445, 910. 19	50, 969. 99	448, 489. 27
Results; deficit.....	15, 483. 14	6, 767. 40	14, 928. 78	29, 273. 42

Status of current accounts receivable, June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$14, 617. 37	\$81, 661. 45	\$1, 076. 25	\$64, 814. 40			\$16, 847. 05
Charges paid in advance			2 9. 13	128. 06			
Construction refunds				75. 20			
Operation and maintenance:							
Water-right charges, project lands (6,725 acres)	1 35, 983. 28	319, 506. 78	3, 992. 62	268, 401. 09	\$6. 00	\$2, 620. 61	48, 485. 08
Penalties and interest	2, 821. 22	11, 647. 32	2, 821. 22	11, 068. 96		578. 36	
Operation and maintenance refunds				52. 50			
Miscellaneous:							
Rental of irrigation water	370. 00	109, 614. 48	437. 60	106, 660. 29		2, 584. 19	370. 00
Rentals, power and light		1, 754. 71		1, 754. 71			
Rentals, grazing and farming lands	84. 00	856. 50	84. 00	856. 50			
Construction forfeitures				97. 50			
Construction penalties and interest	965. 94	2, 741. 08	965. 94	2, 741. 08			
Other			2, 008. 29	43, 019. 81			1, 553. 60
Grand total collections			11, 376. 79	499, 670. 10			

¹ Actual construction accruals for year..... \$17, 208. 07
Relief..... 2, 590. 70

Net..... 14, 617. 37

Actual operation and maintenance accruals for year..... 51, 346. 86
Relief..... 15, 363. 58

Net..... 35, 983. 28

² Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 20.6 per cent of total accruals.
Uncollected operation and maintenance charges as of June 30, 1925, 15.2 per cent of total accruals.

WASHINGTON, YAKIMA PROJECT

The Yakima project, comprising the Sunnyside, Tieton, Kittitas, Moxee, Roza, and Kennewick divisions, is located in Kittitas, Yakima, and Benton Counties, Wash. The irrigation season on the Sunnyside division extends from April 1 to October 31 (214 days), and on the Tieton from April 20 to September 30 (164 days). The water duty on the Sunnyside division is 3 acre-feet per acre, and on the Tieton division 2.4 acre-feet per acre. The soil is volcanic ash, sandy loam, and decomposed basalt. The principal products are alfalfa, apples, pears, peaches, grains, potatoes, sugar beets, hops, stock, and dairy products.

Operation and settlement data, Sunnyside division, Yakima project

	1920	1921	1922	1923	1924
Acreage for which bureau was prepared to supply water	100,733	101,509	101,339	101,329	102,350
Acreage irrigated	93,610	94,500	95,000	95,000	95,000
Number of farms irrigated	2,905	3,065	3,138	3,181	3,391
Miles of canal operated	605	605	605	605	605
Water diverted (acre-feet)	417,522	440,348	421,950	432,963	446,160
Water delivered to land (acre-feet)	284,800	309,709	301,838	313,800	321,495
Per acre of land irrigated (acre-feet)	3.040	3.28	3.18	3.30	3.38
Total number of farms on project	2,905	3,065	3,138	3,181	3,391
Population	10,929	12,080	12,332	10,128	9,617
Number of irrigated farms	2,905	3,065	3,138	3,181	3,391
Operated by owners or managers	2,272	2,322	2,375	2,157	2,287
Operated by tenants	633	743	763	1,024	1,104
Population	10,929	12,080	12,332	10,128	9,617
Number of towns	13	11	11	11	11
Population	6,941	6,941	7,250	7,250	7,410
Total population of towns and farms	17,870	19,021	19,582	17,378	17,027
Number of public schools	40	41	41	41	41
Number of churches	30	30	30	30	30
Number of banks	13	13	12	12	10
Total capital stock	\$380,000	\$397,000	\$360,000	\$360,000	\$285,000
Amount of deposits	\$2,695,848	\$2,914,608	\$2,615,415	\$2,281,606	\$2,377,944
Total number of depositors	11,556	11,643	10,556	9,348	9,239

Operation and settlement data, Tieton division, Yakima project

	1920	1921	1922	1923	1924
Acreage for which bureau prepared to supply water	32,000	32,000	32,000	32,000	32,000
Acreage irrigated	28,000	28,500	28,700	28,550	27,970
Miles of canal operated	335	335	335	335	335
Water diverted (acre-feet)	96,506	100,844	93,754	96,541	95,001
Water served to land (acre-feet)	69,471	71,148	71,105	72,182	73,870
Per acre of land irrigated (acre-feet)	2.47	2.50	2.48	2.55	2.64
Total number of farms on project	1,480	1,480	1,480	1,480	1,480
Population	3,314	3,457	3,542	3,453	3,480
Number of irrigated farms	1,340	1,300	1,300	1,305	1,300
Operated by owners or managers	1,048	1,010	965	875	850
Operated by tenants	292	290	335	430	450
Population	3,314	3,457	3,542	3,453	3,480
Number of towns	8	8	8	8	8
Population	23,000	23,000	23,000	23,000	23,000
Total population of towns and farms	26,314	26,457	26,542	26,453	26,480
Number of public schools	10	10	10	10	10
Number of churches	3	4	4	4	4

Appropriations

Fiscal year 1925:	
Congressional authorizations	\$1,417,699.97
Disbursements	\$853,957.19
Liabilities outstanding	35,692.76
	\$89,649.95
Unencumbered balance June 30, 1925	528,050.02
Fiscal year 1926: Amount specified in appropriation acts	1 295,000.00

¹ Plus unexpended balance of \$375,000 appropriation for Yakima-Kittitas, fiscal year 1925.

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers	\$17,451,101.11	\$71,999.46	\$286,734.74	\$17,809,835.31
Less collections	7,282,887.29			7,282,887.29
Net investment June 30, 1925	10,168,213.82	71,999.46	286,734.74	10,526,948.02

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction	\$821,169.14	\$14,258,432.46
Supplemental construction	10,761.05	135,931.46
Value of works taken over	7,331.12	37,092.41
Total construction cost	839,261.31	14,431,456.33
Operation and maintenance prior to public notice (net)		¹ 63,957.96
Operation and maintenance deficits and arrearages to be repaid with construction	¹ 24.34	77,238.54
		\$14,444,736.91
Less:		
Contributed funds		63,736.50
Construction revenues	7,781.01	261,914.13
		325,650.63
Total to be repaid by water users	831,455.96	14,119,086.28
Contracted repayments, water-right contracts:		
Individuals	218.75	3,434,540.91
Warren Act	253,357.76	2,179,687.37
Irrigation districts	¹ 4,561.36	2,023,475.32
Special		2,279,600.00
Totals	249,015.15	9,917,303.60

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost	\$239,600.32	\$2,773,837.00	\$247,935.39	\$2,908,812.25
Operation and maintenance returns:				
Contracted	260,100.78	2,656,665.19	258,099.38	2,723,586.62
Penalties	1,966.09	39,770.34	6,365.36	44,826.93
Discounts (contra)	4,214.99	32,929.20	3,825.15	35,373.44
Miscellaneous revenues	5,849.08	94,066.00	6,019.26	98,603.17
Subtotals	263,700.96	2,757,572.33	266,658.85	2,831,643.28
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction	¹ 194.90	77,113.00	¹ 24.34	77,238.54
Total	263,506.06	2,834,685.33	266,634.51	2,908,881.82
Results, excess	23,905.74	60,848.33	18,099.12	69.57

¹ Contra.

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water right charges.....	¹ \$443,174.89	¹ \$4,072,973.17	\$268,375.96	\$3,701,354.45	\$7,331.12	\$36,047.07	\$335,571.65
Contributed funds.....		63,736.50		63,736.50			
Total.....	443,174.89	4,136,709.67	268,375.96	3,765,090.95	7,331.12	36,047.07	335,571.65
Charges paid in advance.....			² 3,241.15	3,956.36			
Construction re-funds.....				2,833.62			
Operation and maintenance:							
Water right charges, project lands (31,996 acres).....	92,179.03	836,200.71	88,935.51	748,927.65	2,358.11	19,058.48	68,214.58
Warren Act lands (54,190 approximate acres).....	28,788.29	203,811.21	25,512.89	191,180.44	12.96	22.38	12,608.39
Irrigation districts (67,419 approximate acres).....	121,026.62	1,574,540.86	72,754.96	1,449,514.42	1,454.08	17,337.92	107,688.52
Other lands (84,611 approximate acres).....	16,105.44	109,033.84	18,355.44	104,193.84			4,840.00
Total.....	258,099.38	2,723,586.62	205,558.80	2,493,816.35	3,825.15	36,418.78	193,351.49
Penalties and interest.....	6,365.36	44,826.93	5,958.13	44,419.70			407.23
Charges paid in advance.....			² 22.61	101.14			
Operation and maintenance re-funds.....				1,045.65			
Miscellaneous:							
Rentals of irrigation water.....	3,481.44	147,367.16	3,195.26	145,940.70			1,426.46
Rentals of power and light.....		3,635.33		3,635.33			
Rentals of grazing and farming lands.....	1,970.19	25,031.69	2,168.19	24,820.49			211.20
Construction forfeitures.....				1,057.62			
Penalties and interest.....	12,296.67	73,290.04	12,296.67	73,290.04			
Other.....			113,732.95	722,879.34			2,490.22
Grand total collections.....			608,022.20	7,282,887.29			

¹ Includes \$44,642.65 of accruals not due until July 1, 1925.² Contra.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 8.2 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 7.1 per cent of total accruals.

WYOMING, RIVERTON PROJECT

The Riverton project lies in Fremont County, Wyo., northeast of Wind River and west of the Big Horn River. The irrigation season is from May 1 to September 30. The average altitude is 5,200 feet; the average annual rainfall is about 8 inches; the average maximum temperature is about 95° F.; and the average minimum temperature -27° F. The soil is a heavy loam. The principal products are alfalfa, cereals, sugar beets, and potatoes; and the principal markets, Omaha, Denver, and local.

*Settlement data, Riverton project*¹

Item	1920	1921	1922	1923	1924
Number of towns.....	2	2	2	2	2
Population.....	2, 500	² 2, 500	² 2, 500	² 2, 500	² 2, 500
Number of public schools.....	2	2	2	2	2
Number of churches.....	7	7	7	7	7
Number of banks.....	5	5	5	5	5
Total capital stock.....	\$135, 000	\$135, 000	\$135, 000	\$135, 000	\$135, 000
Amount of deposits.....	\$1, 500, 000	² \$900, 000	² \$1, 000, 000	² \$1, 000, 000	² \$1, 000, 000
Number of depositors.....	2, 600	2, 200	2, 200	² 2, 800	2, 800

¹ Project in process of construction, no water deliveries.² Estimated.*Appropriations*

Fiscal year 1925:		
Congressional authorizations.....		\$755, 615. 34
Disbursements.....		\$702, 474. 35
Liabilities outstanding.....		41, 153. 15
		743, 627. 50
Unencumbered balance June 30, 1925.....		11, 987. 84
Fiscal year 1926: Amount specified in appropriation acts.....		790, 000. 00

Voucher transactions

	Reclamation fund	Wind River ceded lands (Indian)	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$2, 539, 918. 55	\$359, 176. 04	\$45, 271. 60	\$2, 944, 366. 19
Less collections.....	52, 363. 95			52, 363. 95
Net investment June 30, 1925.....	2, 487, 554. 60	359, 176. 04	45, 271. 60	2, 892, 002. 24

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works, original construction.....	\$594, 242. 30	\$2, 274, 232. 17
Operation and maintenance prior to public notice (net).....	¹ 150. 00	¹ 261. 75
Less construction revenues.....	933. 07	7, 532. 93
Total to be repaid by water users.....	593, 159. 23	2, 266, 437. 49

¹ Contra.

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Miscellaneous:							
Rentals of irrigation water.....	\$150. 00	\$261. 75	\$150. 00	\$261. 75	-----	-----	-----
Rentals power and light.....	3, 926. 91	3, 926. 91	3, 000. 79	3, 000. 79	-----	-----	\$926. 12
Other.....	-----	-----	15, 384. 69	49, 101. 41	-----	-----	581. 55
Grand total collections.....	-----	-----	18, 535. 48	52, 363. 95	-----	-----	-----

WYOMING, SHOSHONE PROJECT

The Shoshone project is located principally in Park and Big Horn Counties, Wyo., with a small area in Carbon County, Mont. The annual rainfall for the Garland division has averaged 5.35 inches for the past 17 years, and for the Frannie division 4.90 inches over a period of 9 years. The average elevation of the project lands is about 4,500 feet above sea level. Temperature records over a period of 17 years for the Garland division show a mean maximum of 96.7° F. and a mean minimum of -23.9° F.; for the Frannie division temperature records over a period of 9 years show a mean maximum of 101° F. and a mean minimum of -29.9° F. The principal agricultural products on the developed part of the project are alfalfa, wheat, oats, potatoes, sugar beets, and beans. The principal markets are Billings and Butte, Mont.; Casper, Wyo.; Omaha, Nebr.; and Kansas City, Mo.

Operation and settlement data, Shoshone project

Item	1920	1921	1922	1923	1924
Acreage for which bureau is prepared to furnish water.....	65, 890	65, 826	71, 223	70, 350	63, 240
Acreage irrigated.....	45, 650	45, 420	42, 870	38, 650	36, 510
Miles of canal operated.....	458	460	457	452	450
Water diverted (acre-feet).....	187, 329	221, 419	192, 851	176, 198	175, 873
Water delivered to land (acre-feet).....	113, 065	112, 324	99, 170	91, 082	89, 036
Per acre of land irrigated (acre-feet).....	2. 50	2. 47	2. 33	2. 36	2. 44
Total number of farms on project.....	1, 009	1, 005	1, 083	1, 071	1, 071
Population.....	2, 730	2, 686	2, 444	2, 025	1, 969
Number of irrigated farms.....	910	935	914	838	820
Operated by owners or managers.....	695	646	696	426	584
Operated by tenants.....	215	289	218	412	236
Population.....	2, 730	2, 686	2, 444	2, 025	1, 969
Number of towns.....	5	5	5	5	5
Population.....	1, 345	1, 541	1, 585	1, 705	1, 400
Total population of towns and farms.....	4, 075	4, 227	4, 029	3, 730	3, 369
Number of public schools.....	12	7	7	7	7
Number of churches.....	8	8	8	8	8
Number of banks.....	6	5	4	3	3
Total capital stock.....	\$125, 000	\$110, 000	\$100, 000	\$85, 000	\$85, 000
Amount of deposits.....	\$644, 000	\$543, 000	\$441, 000	\$466, 000	¹ \$366, 000
Number of depositors.....	2, 605	2, 400	2, 400	2, 300	¹ 1, 473

¹ Does not include Powell National Bank salvage fund of \$85,000 nor its depositors.

Appropriations

Fiscal year 1925:		
Congressional authorizations.....	-----	\$526, 436. 21
Disbursements.....	\$240, 402. 81	
Liabilities outstanding.....	49, 516. 82	
Unencumbered balance June 30, 1925.....	-----	289, 919. 63
Fiscal year 1926: Amount specified in appropriation acts.....	-----	236, 516. 58
		414, 000. 00

Voucher transactions

	Reclamation fund	Judgments, Court of Claims	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$9,705,684.22	\$322,164.67	\$164,135.50	\$10,191,984.39
Less collections.....	1,383,491.72			1,383,491.72
Net investment June 30, 1925.....	8,322,192.50	322,164.67	164,135.50	8,808,492.67

Construction account

	Fiscal year 1925	To June 30, 1925
Cost of irrigation works:		
Original construction.....	\$154,974.49	\$7,578,987.59
Supplemental construction.....	101,823.99	1,649,899.25
Total construction cost.....	256,798.48	\$9,228,886.84
Operation and maintenance prior to public notice (net).....		21,398.67
Operation and maintenance deficits and arrearages to be repaid with construction.....	44,759.28	44,907.03
		9,295,192.54
Less:		
Contributed funds.....	900.00	1,900.00
Construction revenues.....	7,691.92	83,700.41
		85,600.41
Total to be repaid by water users.....	292,965.84	9,209,592.13
Contracted repayments: Water-right contracts (individuals).....	136,725.45	5,765,849.71

¹ Contra.*Operation and maintenance account*

	Calendar year 1924	To Dec. 31, 1924	Fiscal year 1925	To June 30, 1925
Operation and maintenance cost.....	\$57,839.83	\$715,507.93	\$69,375.32	\$754,482.58
Operation and maintenance returns:				
Contracted.....	369.31	671,518.87	¹ 1,367.59	668,930.17
Penalties.....	1,308.66	10,584.38	1,201.62	11,379.93
Discounts (contra).....	532.55	10,644.70	334.09	10,677.74
Miscellaneous revenues.....	8,487.91	23,150.22	8,204.42	28,386.64
Subtotals.....	9,363.33	694,608.77	7,704.36	698,019.00
Other credits: Operation and maintenance deficits and arrearages to be repaid with construction.....	44,759.28	44,907.03	44,759.28	44,907.03
Total.....	54,122.61	739,515.80	52,463.64	742,926.03
Results:				
Excess.....		24,007.87		
Deficit.....	3,717.22		16,911.68	11,556.55

¹ Contra.

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Construction:							
Water-right charges	\$53,228.79	\$967,011.45	\$4,314.98	\$628,956.92	\$588.81	\$2,424.66	\$335,629.87
Contributed funds.....	900.00	1,900.00	900.00	1,900.00	-----	-----	-----
Total.....	54,128.79	968,911.45	5,214.98	630,856.92	588.81	2,424.66	335,629.87
Charges paid in advance.....			¹ 23.06	584.99			
Construction refunds.....			1,941.29	4,524.63			
Operation and maintenance:							
Water-right charges, project lands (62,644.38 acres).....	¹ 1,367.59	668,930.17	17,701.94	439,093.25	1,104.23	19,701.35	210,135.57
Penalties and interest.....	1,201.62	11,379.93	904.65	8,727.27	296.97	2,652.66	
Charges paid in advance.....			22.99	361.49	¹ 73.39	27.61	
Operation and maintenance refunds.....			669.45	1,078.90			
Miscellaneous:							
Rentals of irrigation water.....	7,779.17	25,427.69	7,650.53	25,159.00	55.92	55.92	212.77
Rentals, power and light.....	9,452.91	24,090.25	9,359.83	23,329.27	16.00	16.00	744.98
Rentals, grazing and farming lands.....	1,038.50	10,628.11	1,017.50	10,397.11			231.00
Construction forfeitures.....			3,070.98	9,831.28			
Construction penalties and interest.....	667.54	9,898.97	667.54	9,898.97			
Other.....			8,274.83	219,648.64			14,470.79
Grand total collections.....			56,473.45	1,383,491.72			

¹ Contra. ² Reduction due to relief and cancellations. Actual accruals for year, \$51,779.09.

NOTE.—Uncollected construction water-right charges as of June 30, 1925, 34.7 per cent of total accruals. Uncollected operation and maintenance charges as of June 30, 1925, 31.4 per cent of total accruals.

SECONDARY INVESTIGATIONS

ARIZONA

COLORADO RIVER (BOULDER CANYON RESERVOIR) INVESTIGATIONS

The bureau contributed \$1,300 to the upkeep and operation of the Bright Angel gaging station on the Colorado River, the balance of the cost of this work being met by the Federal Power Commission and the State of Arizona. The actual work is done by the Geological Survey.

CALIFORNIA

SACRAMENTO VALLEY INVESTIGATIONS

Iron Canyon project.—The investigation was continued under the provisions of a contract dated January 26, 1924, between the United States; the Department of Public Works, Division of Engineering and Irrigation, of the State of California; and the Sacramento Valley Development Association. Of the \$10,000 made available for the investigation, \$5,000 was contributed by the United States, \$2,500 by the State, and \$2,500 by the association.

The project contemplates the irrigation of a gross area of 276,900 acres of land, all but 7,000 acres of which are located on the west side of Sacramento Valley between Red Bank Creek on the north and the Colusa-Yola County line on the south. Storage is to be provided in Iron Canyon Reservoir. The project differs from that described in the twentieth annual report in that the main canal would divert from the Sacramento River 6 miles below the reservoir, providing a better location along the foothills with the exclusion of considerable areas of lands of doubtful utility and also providing opportunity for the development of more power at the dam.

Preliminary location surveys were made of main canals to serve the project. Designs and estimates of all features were practically completed and the report was in course of preparation at the end of the fiscal year.

Salt water barrier.—Investigations of a barrier to prevent incursions of salt water into the delta region irrigated from the Sacramento River were continued under the provisions of a contract of January 26, 1924, between the United States; the Department of Public Works, Division of Engineering and Irrigation, of the State of California; and the Sacramento Valley Development Association, and two supplementary contracts dated June 26, 1924, and March 3, 1925, providing for a total of \$70,000 to be made available for the investigations; \$35,000 by the United States, \$27,500 by the State, and \$7,500 by the association. The East Bay utilities district has contributed \$600 additional. Total costs to the end of the fiscal year were about \$56,000.

Three dam sites are under investigation: The Army Point site, at the lower end of Suisun Bay; the Dillon Point site, in Carquinez Strait; and the Point San Pablo site, at the lower end of San Pablo Bay. The first two are alternative sites for a dam to make Suisun Bay fresh, while the latter would serve both San Pablo and Suisun Bays.

Drilling to develop foundation conditions was started on a two-shift basis beginning August 15, 1924. Field work at the Army Point and Dillon sites has been completed, that at the Point San Pablo site will probably be completed in July.

Operations were directed from Berkeley, Calif., where office work in connection with the preparation of designs and estimates was in progress throughout the year.

DEER-BUTTE CREEK (CHICO) INVESTIGATIONS

A cooperative contract by the United States and the Chico Chamber of Commerce, dated December 11, 1924, provided for an investigation of an irrigation development in Chico vicinity with waters from Butte Creek, Deer Creek, and Sacramento River; \$5,000 being made available by each party upon execution of the contract, with provision for additional amounts up to \$5,000 each.

Three reservoir sites on Butte Creek have been surveyed and superficially examined and a part of the distribution system surveyed. With the funds on hand it is planned to complete the survey of distribution systems from both creeks, to survey another reservoir site, and to prepare estimates of cost on the basis of such data.

The State of California in cooperation with the United States Department of Agriculture is conducting a soil survey of the lands proposed for irrigation.

CALIFORNIA POWER INVESTIGATIONS

Previous work is described in the twenty-third annual report.

North Fork Stanislaus River.—Field examinations were made by the board in September, 1923. The study of this problem was carried to completion in November, 1924, and a report submitted on December 1, 1924.

The work assigned to the board was confined to the studies of the three streams selected and has thus been fully completed.

COLORADO

SAN LUIS VALLEY INVESTIGATIONS

Following a reconnaissance of the Rio Grande Basin down to and including the Rio Grande project, memorandum reports were prepared by engineers of the bureau bearing on progress in irrigation and drainage development since previous reports thereon.

In the early part of the year much activity was apparent in Colorado and New Mexico in the preparation of data to be used in formulating the interstate compact for division of Rio Grande waters, and much of these data was exchanged between the various parties collecting it.

Arrangements for investigations in San Luis Valley, in cooperation with the State of Colorado, for the purpose of outlining a policy of future development without interference with existing rights, were unsuccessful.

SAN JUAN BASIN INVESTIGATIONS

Pine River project.—Field work in connection with this investigation was started in the summer of 1924, and report completed in March, 1925.

Diversion would be made from Pine River about 4 miles north of Bayfield and the main canal would run in a general westerly direction, crossing Florida River about 2 miles northwest of Florida and ending in a junction with the Florida Canal near Falfa; a branch of the main canal would run southerly near Oxford and with a lift of 103 feet cover lands along the north slope of Mesa Mountains. Storage would be provided at Bayfield site below the canal line to replace direct flow diverted to project lands and belonging to prior direct-flow rights. The project comprises 68,000 acres of lands now partially irrigated and 34,600 acres of new lands of which 6,600 acres would require pumping with power to be developed on the project. All irrigable lands are in private ownership, 19,730 acres being Indian allotments.

The topography and soils are generally excellent with little danger of alkali or drainage difficulties. Excellent crops of alfalfa, grains, vegetables, and hardy fruits are obtained on the partially irrigated and on adjacent lands. Local markets and transportation facilities are poor, the latter consisting of one narrow-gauge railroad. Construction costs are estimated at \$136 per acre for the new lands and from \$13 to \$30 per acre for lands now having a partial water supply.

There is little demand at this time for extension of the present irrigated area or for improvements in water supply for existing lands. The water rights on Pine River have not been adjudicated.

La Plata Mesas project.—A transmountain canal would divert waters of western tributaries of Animas River southerly from and including Hermosa Creek at an altitude of 7,500–8,000, passing through the Animas-La Plata Divide west of Durango. Such diversions, largely flood waters, together with a small unused surplus of waters in La Plata River drainage with the aid of storage at a number of proposed sites would by direct use and exchange be used to augment present supplies to partially irrigated and to dry lands on the mesas south of Hesperus. These lands are of the highest quality in soil and topography, though by climate restricted in their production to the hardier, staple crops. Funds for a detailed

investigation were not available, but a field reconnaissance and office studies of water supply indicated that the transmountain diversion is infeasible by reason of excessive cost and limited water supply. The most promising possibility appeared to be the construction of supplemental storage for some 20,000 acres of land now under irrigation. The best plan appears to be a reservoir of about 20,000 acre-feet capacity at the Long Hallow site to be supplied by a feed canal from La Plata River.

Montezuma project.—Previous investigations of this project are described in the eighteenth and twentieth annual reports. A reorganization of the financial structure of this project combined with gradual improvement of the status of the individual settlers has placed the project on its feet as a going concern. Barring unforeseen difficulties, the project is unlikely to revert to the conditions of 1919, when Government aid was requested. The present policy of improvement and extension to the limit of available water supply with the aid of reservoir sites within the irrigable area bids fair to accomplish the final development of possibly 75,000 acres, provided no bar arises to full diversion of Dolores River and provided Indian lands will be permitted to enter the project.

The extension of this project to an area of 75,000 acres will deplete the water supply of Dolores River to an extent that will make the development of the proposed Dolores project infeasible.

IDAHO

BOISE PROJECT EXTENSION, BLACK CANYON DIVISION

Considerable storage will be required ultimately for the full development of the Black Canyon division. The cheaper storage sites are individually of insufficient capacity for this purpose and as some storage is at present necessary to insure an adequate power supply from Black Canyon Dam for the use of the Gem irrigation district, investigations have been made for raising Little Payette Lake. Earlier plans contemplated a capacity exceeding 60,000 acre-feet, but recent testing of the ridge separating this lake from Big Payette Lake and of the gaps in the valley at the lower end make it advisable now to hold the capacity much lower. The present plan is to provide a total of 30,500 acre-feet capacity, of which 12,500 acre-feet would be for a local irrigation project without other feasible source for needed storage and 18,000 acre-feet for use of the Black Canyon division. Appropriation has been made sufficient for a capacity of 18,000 acre-feet, and construction will soon be started, provided further investigation of the site warrants. Construction to any capacity greater than 18,000 acre-feet will be contingent on the advance by beneficiaries of additional cost of such greater capacity.

DUBOIS PROJECT

At the request of the Dubois Project Finance Association, investigation was undertaken for diversion of western tributaries of North Fork of Snake River above the Island Park Reservoir site to lands in the vicinity of Dubois. The results so far indicate a small area could be served at high cost. A similar project is described in the first and second annual reports. Final report on recent investigations is expected to be completed at an early date.

MONTANA

EASTERN AND NORTHERN TRIBUTARIES OF MILK RIVER

Article VI of the treaty of January 11, 1909, between the United States and Great Britain provides for the equal division of the waters of the St. Mary and Milk Rivers, and by order of October 4, 1921, by the International Joint Commission handling the interpretation of this treaty, the waters of the eastern tributaries of Milk River rising in Canada and flowing south to join the Milk River in Montana are to be divided equally between the two countries at the point where they cross the international boundary.

During the hearings before the International Joint Commission at St. Paul, Minn., in May, 1915, W. B. Sands, representing the Milk River Water Users' Associations, advanced the proposition that the flow of the individual streams might be more advantageously divided on an unequal basis, but still dividing the sum of their flows equally. In 1922, the Western Canada Irrigation Associa-

tion adopted a resolution suggesting that the International Joint Commission study the flow of these tributaries and arrange for a division along the lines suggested by Mr. Sands.

In furtherance of this plan, Canda has made extensive irrigable area surveys and collected stream flow data. No funds were available for this work in the United States until the passage of the reclamation appropriation for the fiscal year 1926, when the sum of \$10,000 was made immediately available.

The investigation of the streams was commenced early in June, 1925, but at the close of the fiscal year only preliminary data had been collected.

NEW MEXICO

PECOS RIVER INVESTIGATIONS

A hydrometric survey of the Pecos River above Carlsbad, N. Mex., is being made in cooperation with the State of New Mexico by contract dated May 18, 1925, providing for expenditures up to \$4,000 by the United States and \$2,000 by the State of New Mexico, principally in determination of stream losses. Earlier investigations, covered by report on Carlsbad project extensions, dated May, 1923, showed the desirability of building additional storage needed for the Carlsbad project on the upper Pecos River, rather than near the project and the Alamogordo site was selected as the most feasible. Objection has since been made to this plan because of the possibility of large losses in the river below the site. The object of the present investigation is to determine Pecos River losses as affecting the delivery of stored water from the proposed Alamogordo Reservoir to the Carlsbad project, particularly in the portion of the river between Fort Sumner and Acme, where very few discharge records are available because of the flashy, intermittent character of the run-off and the shifting, sandy stream-bed. Former gaging stations have been reestablished and new ones installed where necessary and conclusive data as to river losses will probably be obtained.

NEW MEXICO-COLORADO

SAN JUAN BASIN INVESTIGATIONS

A contract by the United States and the State of New Mexico for the investigation of irrigation possibilities in the San Juan Basin dated September 12, 1923, provided for expenditures of not to exceed \$10,000 by each party. Field work was begun in November, 1923.

Animas project.—Previous investigations of this project, then called the La Plata Valley project, will be found in the third and fourth annual reports of the bureau. The recent investigations were largely an effort to obtain a better route for the main canal from Animas River. The best location was found to be diversion just below Durango reaching La Plata River with a length of 45 miles, including 7 miles of tunnel and about 13 miles of lined canal and major structures. The rest of the canals would be expensive owing to numerous bad lands to be traversed and deep wide drainage channels to be crossed. An unusual length of canals would be required, as there are but 60,000 acres of irrigable lands in a gross area of nearly 300,000 acres lying north of San Juan River and westerly to the Ute Reservation. The irrigable area can be increased by 75,000 acres or up to the limit of available water supply by inclusion of Indian lands further west. In the easterly portion of the project the irrigable lands occur largely as glades between high rocky ridges; in the reservation large areas of undulating topography are found. The soils are generally deep, of shale and sandstone origin, with a sandy loam predominating and merging into heavy clays at the western end, where alkali is also evident. Marked slopes are prevalent and natural drainage channels would form the principal drains, but branch drains would in places be required owing to tight soil and alkali.

Primary storage would be provided on Animas River with a dam 2 miles above Durango. Secondary storage, for better control of canal operation and to reduce main canal capacities, would be provided at the Meadows site northwest of Farmington. The estimated cost of construction averages \$244 per acre if the project is limited to lands outside the Indian reservation, but would be reduced materially if Indian lands are included. Outside the reservation only about 10 per cent of the land is owned by the United States.

The conclusions reached in the report are that the small demand for irrigated land, the lack of local markets and adequate transportation, and the high construction cost will not warrant favorable consideration in the near future.

Turley project.—Earlier investigations of this project will be found described in the twentieth annual report, as the San Juan project. Soon after the investigation was started in the past fiscal year, it was found that the project unquestionably would be infeasible unless extended to include Indian lands within the Navajo Reservation. Request on the Indian Bureau for permission to carry the survey into the reservation was denied, and the investigation thereupon dropped.

OKLAHOMA

RECONNAISSANCE OF SOUTHWESTERN OKLAHOMA

At the request of Congressman James V. McClintic, a field examination and report reviewing all available data has been made of the following proposed projects in southwestern Oklahoma: The Lugert, Otter Creek, and Turkey Creek projects in Jackson County; the Navajo project in Kiowa, Jackson, and Tillman Counties; the Saddle Mountain project in Caddo and Kiowa Counties; and the Lawton project in Comanche County. A report was submitted in October and approved on December 1, 1924.

There are no public lands in any of the projects and practically all of the area embraced in them is now being farmed. The annual rainfall in this region averages approximately 30 inches, and in most years provides seasonable moisture for the production of good or fair crops. There is never a complete failure of all crops.

Available reservoir sites would provide storage for only a part of the land now in cultivation, and the recorded discharges of the streams depended upon to fill them do not cover a sufficient period of time to assure an adequate water supply during years of low precipitation.

If satisfactory arrangements can be made with the city of Lawton for the surplus storage in Lake Lawtonka, water for about 2,500 acres on the Lawton project would be available. For all of the other projects additional run-off records should be obtained before they are given further consideration.

Previous reports on all but the Saddle Mountain project will be found in the annual reports of the bureau for the years 1902 to 1907, inclusive, and for 1913 to 1917, inclusive.

OREGON

HARNEY PROJECT

Previous investigations of this project were covered by a report made in cooperation with the State of Oregon published in February, 1916. Since then the older lands, which were largely irrigated, have been formed into an irrigation district to provide supplemental storage. The district has expended large sums for engineering and organization, but so far has failed to obtain funds required for construction. An office review of more recent data has been prepared in Denver. A contract dated June 4, 1925, has been executed with the district providing for further investigations by the United States to determine feasibility of construction under the reclamation law; the United States to spend up to \$5,000, the district to furnish information and data, primarily obtained in previous work financed by the district.

OREGON-WASHINGTON

UMATILLA RAPIDS

The work described in the twenty-second and twenty-third annual reports was continued to completion and report made October 18, 1924.

The power dam for this project would be located 2 miles above Umatilla at the foot of rapids in the Columbia River. A wide range in water levels from low to high water and interference with existing railroads in any event make it advisable to construct the highest dam considered feasible with the view of utilizing excess power so made available. With such a height, the power head would vary from 29 to 58 feet and water would in extreme stages be backed up to Wallula, requiring the raising or removal of 33 miles of main-line railroad. This dam would produce a constant output of 420,000 horsepower except on rare occasions. Fluctuating power loads would require an installation of roughly twice this amount

and the total cost of dam and power plant including a navigation lock and including interest during an eight-year construction period is estimated at \$45,000,000. Production cost of power with the plant fully loaded, including interest at 4 per cent is estimated at 0.12 cent per kilowatt-hour.

At the power dam, water could be lifted 489 feet to cover 50,000 acres of agricultural lands on the Washington side down to Alderdale, lying behind the sand dunes bordering Columbia River. The construction cost for these lands would be \$116 per acre and operation and maintenance charges including power at 0.12 cent per kilowatt-hour, \$8.41 per acre annually. On the Oregon side, about 10 miles upstream from the dam, water could be lifted 486 feet to cover 6,000 acres lying above Cold Springs Reservoir at a construction cost of \$218 per acre and an annual operation charge of \$14.39 per acre. Water could also be lifted a total of 461 feet by three stages, one at the dam, one 2 miles south, and another 12 miles southwest of Umatilla with connecting canals for an area of 38,000 acres lying parallel to and 7 to 12 miles south of Columbia River, at a construction cost of \$249 per acre and an annual operation charge of \$11.19 per acre.

With regard to the irrigation construction the conclusions reached were that both construction and operation costs are too high to warrant further consideration at this time. The estimates indicate an attractive power possibility provided it is developed to its full capacity. The market for power for ordinary uses, is, however, too limited and the stability of electrochemical or electrometallurgical industries too insecure to furnish a basis of financing for this power development.

TEXAS

RED BLUFF RESERVOIR

Previous work will be found described in the twenty-second and twenty-third annual reports. In the past year, all records of diamond drilling and recent geologic reports were assembled in a report dated July, 1924. Local irrigation interests in Texas have made surveys of additional dam sites below the Texas-New Mexico State line, but no report thereon has been made available.

UTAH

CASTLE PEAK PROJECT

Previous arrangement for the collection of stream flow data in cooperation with the Geological Survey have been continued.

GREAT SALT LAKE BASIN, CACHE VALLEY INVESTIGATION

This investigation was undertaken at the request of the Cache County Water Users' Association and conducted under cooperative contracts between the United States and the State of Utah. The irrigable lands are located in Cache County in northern Utah. In September, 1924, a preliminary report was made with the following conclusions and recommendations:

Conclusions: (1) Sufficient water is available in Cache Valley with storage at the Hyrum and Porcupine Reservoir sites, for the development of the Cache Valley project up to 60,110 acres of irrigable land; (2) the project is feasible from an engineering and construction standpoint, provided the result of recommended testing and geological examinations of the Hyrum Reservoir site is favorable; (3) The value of improved land with water right in the Cache Valley is from \$150 to \$300 per acre; (4) the lands proposed for development are of good quality and suitable for production of alfalfa, sugar beets, peas, wheat, etc.; (5) the construction of the Cache Valley project at a cost of approximately \$115 per acre for lands furnished a full water right and approximately \$75 per acre for lands furnished a late or supplementary water right, is within the benefits to accrue to the land, and the project is therefore considered feasible.

Recommendations: (1) That the necessary water filings be made for storage at the Porcupine and Hyrum Reservoir sites on the Little Bear River; (2) that the Hyrum Reservoir site be thoroughly tested and a geological report be obtained on the same with regard to the feasibility of its use as a storage reservoir; (3) that gaging stations be installed on the sources of water supply for the proposed project and a complete record be obtained in the future of their discharges; (4) that the problem of the water exchanges, which is the cornerstone of the proposed project, be very fully explained to the present users and their attitude

with reference to the same be obtained; (5) that a complete adjudication be made of the water rights in the proposed project; (6) that a district organization be formed of the lands in the proposed project.

GREAT SALT LAKE BASIN, PROVO RIVER INVESTIGATIONS

The investigations have been continued in cooperation with the State of Utah under the contract of January 3, 1922, and subsequent supplementary contracts, covering in general various investigations since that date made in the basin of Great Salt Lake.

In the fall of 1922, a brief reconnaissance was made of storage sites on Provo River, followed by a preliminary water supply study to determine their effectiveness. In 1923, six dam sites were mapped, river survey maps of the Geological Survey made in 1920 being used to estimate reservoir capacities. Early in 1924, the Bates dam site was tested by drilling, bed rock being found at depths generally less than 30 feet. Earlier surveys of the Deer Creek site were checked in 1924 for capacity and preliminary canal lines run from the outlet therefrom to carry water at high levels for lands west of Utah Lake. This route was found to be too costly. Surveys have been made for enlargement and extension of the Provo Reservoir and North Union Canals diverting northerly from Provo River at the mouth of Provo Canyon with a view of watering the higher lying lands northward to Salt Lake City and, by exchange of water rights, increase the irrigated areas at high levels under creeks crossing these canals and their extensions. Late in 1924, negotiations were started with the Utah Power & Light Co., having a power plant on Provo River below the Deer Creek Reservoir site, for the purpose of arranging a seasonal distribution of water supply better adapted to irrigation needs. At the end of the fiscal year drilling was in progress at the Deer Creek dam site. A progress report dealing with investigations to date and indicating the most feasible development on Provo River is expected to be made in the near future.

WASHINGTON

COLUMBIA BASIN INVESTIGATIONS

In August, 1924, the committee in charge of these investigations, consisting of Assistant Secretary F. M. Goodwin, the Commissioner of the Bureau of Reclamation, and the chief engineer of the bureau, appointed a board for the purpose of reviewing previous engineering reports and extending the investigations to cover agricultural, economic, and settlement features, consisting of Louis C. Hill of Los Angeles; Charles H. Locher of Hancock, Md.; Joseph Jacobs of Seattle, Wash.; Richard R. Lyman of Salt Lake City, Utah; Arthur J. Turner of Spokane, Wash.; and O. L. Waller of Pullman, Wash.

Report was rendered by this board in February, 1925, but has not yet been reviewed by the committee in charge.

The investigations were made under act of Congress of February 21, 1923, with appropriation of \$100,000 which fund was increased by \$10,000 through accretions to the reclamation fund. The lapsing date of the original appropriation, December 31, 1924, was by Senate Joint Resolution 157, approved December 22, 1924, extended to February 15, 1925.

WYOMING

NORTH PLATTE RIVER (CASPER) PUMPING PROJECT

An investigation of pumping possibilities for irrigation between Pathfinder Dam and Casper was started in September, 1924, and report made in December, 1924.

Four units having a total combined area of 9,514 acres were investigated and reported on. Three of these units are close to the city of Casper, and the fourth is 27 miles distant. The lifts range between 45 and 75 feet.

Sources of power for this pumping covered by the report include a power plant at Pathfinder Dam and the purchase of power from a steam-operated, public-utility plant at Casper. A number of tracts of a few acres each, devoted to intensive suburban farming, were found to be irrigated profitably by pumping at this time. A few tracts of alfalfa, irrigated largely by pumping with oil engines, were found to be operated at little profit generally. Work in sufficient

detail for estimates covered three units with a total area of 4,289 acres of first and second class irrigable land; with power obtained from Pathfinder, construction was estimated at \$147 per acre and annual operation and maintenance costs at \$13.76 per acre; with purchased power, costs were respectively \$99 for construction and \$16.20 annually for operation and maintenance.

The indicated annual costs of operation and maintenance for these areas are too high for feasibility with the general farming type of agriculture which would probably be the rule.

A cooperative contract was made on March 30, 1925, with the State of Wyoming for further investigations of the pumping possibilities along the North Platte River to cover all areas between the Pathfinder Dam and the Guernsey Reservoir which were not included in the previous report. The contract provides for expenditure of \$5,000 by the Bureau of Reclamation and \$5,000 by the State of Wyoming. Engineering work was started in the field on May 15 and this work was in progress at the close of the fiscal year. Soil classification will be made

SARATOGA PROJECT

Engineering investigations and a preliminary land classification were covered by report made in July, 1922, following an investigation in cooperation with the State of Wyoming and described in the twenty-first annual report. An agreement with the State dated March 30, 1925, provides for investigation of the agricultural and economic features of the project, including a soil survey which is now in progress under the immediate direction of T. J. Dunnewald of the University of Wyoming, advised and assisted by personnel of the Bureau of Reclamation and of the Bureau of Soils, Department of Agriculture.

EXPERIMENTAL INVESTIGATIONS

Since the establishment of the Bureau of Reclamation considerable experimental work has been in progress to determine hydraulic constants and coefficients to be used in designing irrigation structures. No new experimental work was started during the past fiscal year. Work previously started on inlet and outlet structure losses, and stresses in arch dams, was continued. The installation of the equipment at the Clear Creek arch dam on the Yakima project was completed, and a set of observations were made. These data have been submitted to the Engineering Foundation Committee on Arch Dams for analysis. Equipment for making stress and temperature measurements on the Gerber Dam was installed, and measurements will be begun in the near future.

Tests made in fiscal year 1924 on a model spillway at Bellevue, Colo., were analyzed and a paper prepared for publication in the Proceedings of the American Society of Civil Engineers.

Data previously collected have been analyzed and 14 experimental data cards prepared covering inlet and outlet losses, uplift under dams, corrosion of metal sheets in alkali soils, and discharge coefficients for control section weirs. These cards will be submitted for publication at any early date.

Material progress has been made in reports on canal losses, delivery to lands, project waste, reservoir losses, and consumptive use based largely on data obtained in the operation of Reclamation Bureau projects. A paper on evaporation records, covering observations on all stations operated on the projects has been completed. It will be supplemented by data and deductions bearing on the relation of reservoir evaporation to that observed from various kinds of pans in use.

Papers on design of intakes and outlets for irrigation structures, the movement of water under dams, and the transportation of silt in canals are in course of preparation to be submitted to a special committee of the American Society of Civil Engineers dealing with irrigation hydraulics.

SECONDARY PROJECT INVESTIGATIONS

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$219, 446. 11
Disbursements.....	\$82, 315. 42	
Liabilities outstanding.....	132, 753. 60	
		215, 069. 02
Unencumbered balance, June 30, 1925.....		34, 377. 09
Fiscal year 1926: Amount specified in appropriation acts.....		60, 000. 00

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$2, 137, 200. 66	\$39, 810. 88	\$2, 177, 011. 54
Less collections.....	655, 929. 97		655, 929. 97
Net investment, June 30, 1925.....	1, 481, 270. 69	39, 810. 88	1, 521, 081. 57

Status of current accounts receivable as of June 30, 1925

	Due		Collected				Un- collected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits		
			Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	
Miscellaneous:							
Contributed funds—							
Baker		\$5, 000. 00		\$5, 000. 00			
Other secondary inves- tigations	\$25, 025. 15	495, 808. 61	\$25, 747. 95	463, 938. 07			\$31, 870. 54
Rentals, grazing and farm- ing lands	11, 895. 27	174, 922. 26	12, 465. 44	132, 003. 79		\$42, 497. 67	420. 80
Miscellaneous—							
Baker			1 879. 29				
Other secondary inves- tigations			5, 087. 81	54, 988. 11			203. 17
Grand total collec- tions			42, 421. 91	655, 929. 97			

¹ Contra.

GENERAL INVESTIGATIONS, RECLAMATION SERVICE, 1923—DECEMBER 31, 1924

Appropriations

	General investigation fund, fiscal year 1924-25	Reclamation fund
Congressional authorizations.....	\$314, 939. 91	\$26, 103. 30
Less disbursements and liabilities outstanding.....	306, 467. 48	25, 462. 67
Unencumbered balance, June 30, 1925.....	8, 472. 43	640. 63

Voucher transactions

	General in- vestigations fund	Reclama- tion fund	Increase of compensa- tion (net)	Total
Disbursements and net transfers	\$301, 496. 81	\$25, 184. 53	\$5, 115. 61	\$331, 796. 95
Less collections	35, 299. 42	26, 103. 30	-----	61, 402. 72
Net investment, June 30, 1925	266, 197. 39	¹ 918. 77	5, 115. 61	270, 394. 23

¹ Contra.*Status of current accounts receivable as of June 30, 1925*

	Due		Collected cash	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925
Contributed funds	\$2, 814. 63	\$28, 314. 63	\$2, 814. 63	\$28, 314. 63
Other	-----	-----	13, 910. 54	33, 088. 09
Grand total collections	-----	-----	16, 725. 17	61, 402. 72

Cost of investigations and funds contributed for these investigations

Features	Fiscal year 1925	To June 30, 1925	Contrib- uted funds
Arizona-Nevada-Utah: Colorado River tributaries	¹ \$126. 20	\$4, 966. 06	-----
California:			
Sacramento Valley, salt water barrier	22, 031. 35	24, 182. 41	\$8, 103. 30
Iron Canyon investigations	7, 510. 22	7, 962. 62	2, 500. 00
Colorado:			
Badito	¹ 20. 63	585. 74	-----
San Luis Valley	1, 566. 16	3, 291. 76	-----
Colorado-New Mexico: San Juan Basin	451. 40	9, 747. 50	2, 321. 16
Idaho: Black Canyon	215. 00	10, 143. 30	-----
Nebraska: Tri-County	-----	10, 780. 34	5, 390. 17
New Mexico: Estancia Valley	34. 16	215. 31	-----
New Mexico-Texas: Pecos Valley compact	1, 475. 70	4, 524. 37	-----
Oregon:			
Vale	826. 40	5, 792. 06	-----
Owyhee	701. 09	9, 834. 14	-----
Oregon-Washington: Umatilla Rapids	6, 257. 77	58, 926. 40	10, 000. 00
Texas: Red Bluff Reservoir	235. 69	6, 906. 13	-----
Washington:			
Columbia Basin	29, 230. 09	96, 879. 18	-----
Yakima extensions	30, 627. 85	32, 926. 09	-----
Total	100, 416. 05	287, 663. 41	28, 314. 63

¹ Contra.

Statement of costs incurred on investigations made by the United States Bureau of
to June

[References to engineers in charge and date of reports in the following statement refer to the most recent, tations each covered a relatively large general area containing a number of possible projects and the of accounts will not readily permit segregation of such joint costs]

State and project or investigation	Contractor	Date of agreement	Funds furnished under agreement		
			United States	Contractor	Total
Arizona:					
Hualpai Wells	State of Arizona	Apr. 19, 1916	\$1,623.62	*\$3,961.53	\$5,585.15
Gila River storage	do	Jan. 9, 1920	6,580.75	13,714.42	20,295.17
Parker	Noncooperative				
San Carlos	{ San Carlos Irrigation Association.	June 4, 1920		8,638.54	8,638.54
	{ State of Arizona	July 1, 1920			
Little Colorado	Noncooperative				
San Pedro	do				
Paradise-Verde	Salt River Valley Water Users' Association.	Informal		929.14	929.14
Colorado River diversions.	State of Arizona	do	1,957.23	(*)	*1,957.23
Colorado River tributaries.	Noncooperative				
Arizona-California:					
Boulder Canyon	{ Imperial irrigation district.	{ Jan. 27, 1921	35,000.00	141,000.00	176,000.00
	{ Coachella Valley district	{ Dec. 29, 1921			
	{ Palo Verde levee district	{ Dec. 14, 1920			
	{ City of Los Angeles	{ Nov. 17, 1921			
	{ City of Pasadena	{ Informal			
Colorado River Basin	Noncooperative	Feb. 16, 1922 May 31, 1922			
California:					
Iron Canyon	Iron Canyon Association	Oct. 6, 1913	9,584.89	9,133.44	18,718.33
Do	Iron Canyon Association and State of California.	May 5, 1919	8,670.38	*18,087.67	26,758.05
Do	Sacramento Valley Development Association and State of California.	Jan. 26, 1924	5,462.62	*4,127.00	9,589.62
Pit River	State of California	May 27, 1914	2,499.18	*2,500.00	4,999.18
Lower Pit River	Northern California Irrigation Association.	Sept. 10, 1914	2,297.37	2,297.38	4,594.75
Warner reservoir	Volcan Land & Water Co.	July 12, 1920		5,378.35	5,378.35
Imperial Laguna	Imperial Laguna Water Co.	July 6, 1917		1,543.81	1,543.81
Imperial Valley	Imperial irrigation district	Aug. 28, 1920	13,008.99	26,009.66	39,018.65
Owens Valley	City of Los Angeles	Informal	12,061.92	*14,016.99	26,078.91
Do	do	Apr. 29, 1920		18,232.01	18,232.01
Jess Valley	Modoc County Development Co.	Sept. 19, 1919	1,901.01	1,901.01	3,802.02
Honey Lake	Southern Lassen Irrigation Association.	Mar. 18, 1915	1,945.60	500.00	2,445.60
Sacramento Valley— Early investigations	Noncooperative				
Salt Water barrier	{ Sacramento Valley Development Association.	Jan. 26, 1924	24,846.84	*24,673.95	49,520.79
	{ State of California	June 26, 1924			
	{ do	Mar. 3, 1925			
Kings River storage	East Bay Mun. Ut. Dist.	Sept. 19, 1924			
Turlock-Modesto	Noncooperative				
Oakdale - South San Joaquin	do				
Putah Creek	do				
San Joaquin	do				
San Luis Rey	do				
San Ysidro	do				
Woodbridge	do				
California power investigations.	Federal Power Commission.	Informal	3,057.62	*581.98	*3,639.60
Stony Gorge Reservoir.	Noncooperative				
Chico (Butte Deer Creek).	Chico Chamber of Commerce.	Dec. 11, 1924	1,378.82	1,378.82	2,757.64
California-Oregon:					
Shasta Valley	Klamath - Shasta Valley Irrigation District and State of California.	Oct. 26, 1921	5,000.00	*40,877.92	45,877.92

Reclamation with funds appropriated for secondary projects and general investigations 30, 1925

though not necessarily most important investigation of the project in question. Some of the earlier inves-
list therefor does not mention a large number of specific projects on which work was done. Condition

Additional expenditures by the United States not covered by agreement	Engineer in charge	Date of report	Remarks
	Schlecht	June 14, 1917	* 2,515.52 expended by State.
	Fisher	Feb. 21, 1921	Principally San Carlos storage.
\$517.91	Schlecht	Oct. 1, 1918	
24,829.51	Fisher	Feb. 21, 1921	
9,554.33	Pease	Sept. 28, 1920	See also Colorado River tributaries.
2,427.34	Evans	May 29, 1904	
	Hamlin	June 7, 1919	
	Preston	Mar. 3, 1920	
	Preston	July 5, 1923	Arizona Engineering Commission. *No record of expenditures by other parties.
4,966.06	Newell	Sept. 1923	Report covers Virgin, Little Colorado, and Williams Rivers.
149,960.28	Young	March, 1924	Covers storage investigations of Lower Colorado River since 1918.
209,863.79	Whistler	1917	Covers investigation of storage possibilities and projects principally during 1914 to 1917 above Grand Canyon.
	do	November, 1914	
	Gault	May, 1920	*\$8,670.38 expended by State.
	Young		*\$1,627 expended by State. Work in progress.
	Peterson	April, 1915	* \$2,500 expended by State.
1,051.00	Means	July, 1915	Known as Shasta County project.
	Longwell	Feb. 28, 1920	
	Preston	Feb. 2, 1918	
2,794.04	Gault	January, 1921	Report under Kincaid Act.
	Claussen-Means	November, 1904	1903, 1904 and 1905. * \$14,016.99 expended by State.
	Conkling	September, 1921	
3.72	Gault	July, 1920	
	Stubblefield	1916	Investigation not completed; contractor defaulted on requisite funds.
43,620.72	Harroun	1909	Covered numerous storage sites.
	Young		* \$16,570.65 expended by State. Work in progress.
1,157.70	Hill	Nov. 12, 1916	Pine Flat Reservoir.
278.97	Burch	Aug. 14, 1918	
1,079.16	do	August, 1918	
211.32	do	Aug. 14, 1918	Known as Dixon project.
3,531.20	Mendenhall	1908	Report covered by U. S. Geological Survey Water-Supply Paper No. 222.
698.53	Longwell	Feb. 28, 1923	
7.50	Burch	Oct. 9, 1918	See twentieth annual report.
180.47	Henny	Dec. 1, 1924	Federal Power Commission Board. * No report of expenditures by other parties other than contributed funds.
7,823.00	Burch	1918-19	\$5,000 advanced by contractor. Work in progress.
	Fisher		
	Gault	April, 1923	* \$9,228.78 expended by State.

*Statement of costs incurred on investigations made by the United States Bureau of
to June*

[References to engineers in charge and date of reports in the following statement refer to the most recent, investigations each covered a relatively large general area containing a number of possible projects and the of accounts will not readily permit segregation of such joint costs]

State and project or investigation	Contractor	Date of agreement	Funds furnished under agreement		
			United States	Contractor	Total
Colorado:					
Badito.....	Noncooperative.....				
Dolores.....	do.....				
White River.....	do.....				
Little Snake River.....	do.....				
Montezuma.....	do.....				
San Luis Valley.....	do.....				
Upper White River.....	do.....				
San Juan Basin.....	do.....				
Lower White River.....	State of Utah.....	{Sept. 1, 1922 June 1, 1923}	\$6,615.25	\$6,615.25	\$13,230.50
Idaho:					
Miscellaneous.....	Nonecooperative.....				
Island Park.....	do.....				
Mountain Home.....	Boise Chamber of Commerce.....	May 12, 1921	7,773.85	7,773.85	15,547.70
Swan Valley.....	Nonecooperative.....				
Dubois.....	Dubois Project Finance Association.....	June 15, 1922	4,055.53	4,055.53	8,111.06
Port Neuf.....	Noncooperative.....				
General investigations.....	do.....				
Weiser River storage.....	do.....				
Black Canyon.....	do.....				
Wood River.....	do.....				
Succor Creek.....	do.....				
Gooding.....	Big Wood Canal Co.....	June 16, 1925			
Montana:					
Clarks Fork.....	Noncooperative.....				
Crow Reservation.....	do.....				
Judith Basin.....	Thos. Nicholson et al.....	Aug. 20, 1919		2,891.42	2,891.42
Lake Basin.....	Nonecooperative.....				
Bitter Root.....	do.....				
Madison river.....	do.....				
Marias.....	do.....				
Missoula-Huson.....	do.....				
Toston.....	do.....				
Kalispell.....	Kalispell Chamber of Commerce.....	Apr. 30, 1920		73.29	73.29
Tally Lake.....	Tally Lake Irrigation district.....	Nov. 28, 1919		2,544.21	2,544.21
Cut Bank.....	Cut Bank Irrigation district.....	June 13, 1921		1,863.01	1,863.01
Camas.....	Farmers Development Association.....	Sept. 28, 1921		100.00	100.00
Blackfeet water supply.....	Toole County Irrigation district.....	Aug. 22, 1923		986.75	986.75
Milk River tributaries.....	Nonecooperative.....				
Montana-North Dakota:					
Miscellaneous investigations.....	do.....				
Nebraska:					
Tri-County.....	Central Nebraska Supplemental Water Association.....	Aug. 1, 1923 ¹	5,390.17	10,390.17	15,780.34
South Platte.....	Noncooperative.....				
Lower Platte.....	Lower Platte Irrigation Association.....	Aug. 24, 1921	8,444.61	15,400.00	23,844.61
Nevada:					
Humboldt River.....	State of Nevada.....	June 30, 1919	722.55	* 1,000.00	1,722.55
Walker River.....	Noncooperative.....				
Upper Owyhee.....	State of Nevada.....	Sept. 1, 1921		292.08	292.08
New Mexico:					
San Juan Basin.....	State of New Mexico.....	Sept. 12, 1923	7,426.34	* 7,426.33	14,852.67
Estancia Valley.....	do.....	Aug. 28, 1923	215.31	430.62	645.93
Middle Rio Grande.....	do.....	Jan. 2, 1920	4,130.07	* 4,915.21	9,045.28
Do.....	Rio Grande survey commission.....	Mar. 31, 1922		5,766.45	5,766.45

Reclamation with funds appropriated for secondary projects and general investigations 30, 1925—Continued

though not necessarily most important investigation of the project in question. Some of the earlier investigator therefor does not mention a large number of specific projects on which work was done. Condition

Additional expenditures by the United States not covered by agreement	Engineer in charge	Date of report	Remarks
\$585.74	Pease	January, 1924	
4,256.27	Burkart	1919	See also San Juan Basin investigations by Fisher.
4,357.00	Stockton	1904	See also Colorado River compilation by Whistler and Upper White River by Green.
951.43	Burkhart	1918	
4,918.10	do	1919	See San Juan Basin investigations by Fisher.
7,609.77	Debler-Walker	Aug. 12, 1924	
6,282.27	Green	June, 1924	Known also as Yellowjacket project.
6,307.61	Fisher	March, 1925	Pine River, La Plata Mesas, and Montezuma projects.
	Green	March, 1924	Known also as Deadman Bench project.
1,327.25	Wiley	Apr. 12, 1918	
4,774.53	Banks-Dibble	1918-19	See also Dubois project.
5,978.57	Banks-Debler	Sept. 13, 1923	
544.88	Gay	Jan. 12, 1909	
26,457.54	Banks		Work in progress.
2,168.01	Hogue	Nov. 4, 1908	
1,191.78			
918.96	Wiley	Dec. 21, 1918	
11,871.43	Bond		Reported in Boise project histories.
168.95	Newell	1904	
2,392.67	Stockton	1904	See also Owyhee project.
	Gault		\$1,000 advanced by contractor. Work not yet inaugurated.
9,248.18	Ward	Nov. 5, 1921	
18,911.96	Stockton	Nov. 16, 1907	
	Fisher	November, 1919	
7,103.26	Stratton	April, 1906	
2,719.64	Moritz	Nov. 12, 1920	
10,729.09	Stratton	Apr. 28, 1906	See also report by Crowe on Toston project, Oct. 10, 1919.
13,546.39	Babb	1905	
3,086.33	Crowe	Jan. 20, 1920	
544.58	do	Oct. 10, 1919	
	Moody	None	
	do	Oct. 20, 1920	
	Snell	1921	
	Moody	Oct. 8, 1921	
	Debler	June, 1924	
463.74	Crocker		Work in progress.
9,296.90			Miscellaneous early investigations.
3,381.70	Smith	May, 1924	
2,877.01	Pease	1903	Project now known as North Sterling irrigation district.
	Smith	Mar. 9, 1923	
	Conkling	December, 1919	* \$1,000 expended by State.
13,696.37	Stevens	June, 1915	
	Conkling	September, 1921	
	Fisher	August, 1924	Animas and Turley projects. * \$5,105.17 expended by State.
	do	None	Work stopped at request of State. * \$430.62 expended by State.
	Burkholder	None	Work performed by the State. * \$4,915.21 expended by State.
	Gault	March, 1923	
28,064.33	Hinderlider	1905	See also San Juan Basin investigations by Fisher called Animas project.

*Statement of costs incurred on investigations made by the United States Bureau of
to June*

[References to engineers in charge and date of reports in the following statement refer to the most recent, investigations each covered a relatively large general area containing a number of possible projects and the of accounts will not readily permit segregation of such joint costs]

State and project or investigation	Contractor	Date of agreement	Funds furnished under agreement		
			United States	Contractor	Total
New Mexico—Con.					
La Plata.....	Noncooperative.....				
Las Vegas.....	do.....				
Urton Lake.....	do.....				
Penasco.....	do.....				
Pecos Valley.....	Pecos Water Users' Association.	Sept. 22, 1920	\$5,700.00	\$5,700.00	\$11,400.00
Do.....	Pecos Water Users' Association and State of New Mexico.	May 2, 1921			
		May 18, 1925			
			344.30	* 319.18	663.48
North Dakota:					
Bismark.....	Noncooperative.....				
Bowman.....	do.....				
Little Missouri.....	do.....				
Washburn.....	do.....				
Nesson.....	do.....				
Oklahoma:					
Lawton.....	do.....				
Turkey Creek.....	do.....				
Cimarron.....	do.....				
General reconnaissance.....	do.....				
Red River.....	do.....				
Oregon:					
Central Oregon.....	do.....				
Columbia River.....	State of Oregon.....	Dec. 12, 1913	17,008.51	* 14,976.18	31,984.69
John Day.....	do.....	May 5, 1913	16,009.57	* 13,179.61	29,189.18
Deschutes.....	do.....	do.....	15,862.85	* 18,504.40	34,367.25
Do.....	do.....	May 23, 1919	7,030.30	* 5,506.09	12,536.39
Do.....	1921-22 noncooperative				
Harney.....	State of Oregon.....	May 5, 1913	1,046.62	* 646.98	1,693.60
Do.....	Harney Valley irrigation district.	June 4, 1925			
Malheur (Vale).....	State and Warm Springs irrigation district.	May 5, 1913	4,982.10	* 5,218.07	10,200.17
Do.....	State of Oregon and Warm Springs irrigation district.	Aug. 26, 1922	2,110.89	5,000.00	7,110.89
Do.....	1924-25 noncooperative				
Ochoco Crooked River.....	State of Oregon.....	May 5, 1913	3,570.30	* 4,241.25	7,811.55
Owyhee.....	do.....	do.....	1,615.74	* 1,197.06	2,812.80
Do.....	do.....	May 17, 1921	4,354.61	4,354.61	8,709.22
Do.....	1924-25 noncooperative				
Rogue River.....	State of Oregon.....	May 5, 1913	1,426.96	* 1,844.93	3,271.89
Silver Lake.....	do.....	do.....	3,407.03	* 3,017.46	6,424.49
Silver Creek.....	do.....	do.....	334.23		334.23
Warner Valley.....	do.....	do.....	1,181.85	* 1,434.92	2,616.77
White River.....	do.....	do.....	97.03	* 397.40	494.43
Willamette Valley.....	do.....	do.....	378.20	* 1,036.55	1,414.75
Klamath River.....	Noncooperative.....				
Teel District.....	do.....				

Reclamation with funds appropriated for secondary projects and general investigations 30, 1925—Continued

though not necessarily most important investigation of the project in question. Some of the earlier investor therefor does not mention a large number of specific projects on which work was done. Condition

Additional expenditures by the United States not covered by agreement	Engineer in charge	Date of report	Remarks
\$5,014.09 17,464.70 5,798.18 1,306.49	Reed do Teeter Bonstedt-Debler Elder	Oct. 24, 1904 Apr. 20, 1905 June, 1924 May, 1923	See also report by Fogg, Pecos River Survey, 1914. Do. Work in progress. State contracted to expend \$2,000. * \$319.18 expended by State.
13,621.69 4,025.03 11,933.52 10,532.73 17,471.83	Churchill Stebbins Stockton Stratton Churchill	Sept. 22, 1905 Jan. 7, 1909 Oct. 14, 1909 May 8, 1909 July 19, 1905	
13,774.82 137.30 8,891.17 1,337.37 60,209.27	Pease do Schlecht Pease Camp	July 26, 1916 July, 1916 1905 October, 1924 1905	See also report on Oklahoma general reconnaissance by Pease. Do. Covers Red River and Turkey Creek projects. See also report on Oklahoma general reconnaissance by Pease.
39,128.82	Jacobs Harza	March, 1909 November, 1914	Early work on large number of projects. Power development at Dalles. * \$14,976.18 expended by State.
	Whistler	February, 1916	Oregon cooperative reports. * \$13,179.61 expended by State.
	do	December, 1914	See also report by Fisher. * \$18,504.40 expended by State.
	Crosby	November, 1920, and Feb. 28, 1921.	Geological examinations. * \$5,506.09 expended by State.
8,360.96 58.05	Fisher Whistler	April, 1922 February, 1916	Includes board report for Federal Power Commission. Oregon cooperative reports. * \$646.98 expended by State. Work not yet started.
82,739.67	Whistler	February, 1916	Oregon cooperative reports. * \$4,467.12 expended by State. \$750.95 of United States expenditures subsequently repaid by Wamsprings irrigation district.
	Bond	January, 1923	
8,129.92	do Whistler	1924 June, 1915	\$4,307.09 was repaid by the Ochoco irrigation district (Oregon cooperative reports). * \$4,241.25 expended by State.
	do	February, 1916	Oregon cooperative reports. See also reports by Bond. * \$1,197.06 expended by State.
1,267.29 27,705.26	Bond do Whistler	November, 1921 January, 1925 February, 1916	\$942.07 of United States expenditures subsequently repaid by Eagle Point and Talent irrigation districts. Oregon cooperative reports. * \$1,844.93 expended by State.
	do	October, 1915	\$775.91 of United States expenditures subsequently repaid by Summer Lake and Silver Lake irrigation districts. Oregon cooperative reports. * \$3,017.46 expended by State.
	do	February, 1916	Oregon cooperative reports.
	do	do	Oregon cooperative reports. * \$1,434.92 expended by State.
	do	do	Oregon cooperative reports. * \$397.40 expended by State.
	do	do	Oregon cooperative reports. * \$1,036.55 expended by State.
347.39 456.35	Newell, Henny-Wiley.	Sept. 14, 1917	

Statement of costs incurred on investigations made by the United States Bureau of to June

[References to engineers in charge and date of reports in the following statement refer to the most recent, tifications each covered a relatively large general area containing a number of possible projects and the of accounts will not readily permit segregation of such joint costs]

State and project or investigation	Contractor	Date of agreement	Funds furnished under agreement		
			United States	Contractor	Total
Oregon—Continued.					
General reconnaissance	Noncooperative				
Furnish system	do				
McKay Creek	do				
Lower Klamath Lake	do				
Umatilla Rapids	State of Oregon	Apr. 15, 1924	\$48,926.40	\$10,000.00	\$58,926.40
South Dakota:					
Angostura	State of South Dakota	May 31, 1917	3,331.70	3,542.61	6,874.31
Texas:					
Cotulla	Noncooperative				
Lower Rio Grande	Lower Rio Grande Conserv. Association.	Feb. 25, 1919	15,837.37	15,394.44	31,231.81
Do	Cameron and Hidalgo Counties improvement districts.	July 6, 1922		5,506.79	5,506.79
Do	Lower Rio Grande Valley Chamber of Commerce.	Nov. 29, 1920		12,543.12	12,543.12
Do	Lower Rio Grande Valley Water Users' Association.	Informal, Sept., 1921		558.49	558.49
Red Bluff reservoir	Pecos Valley Water Users' Association.	Oct. 25, 1921		5,500.00	5,500.00
Pecos River survey	Noncooperative				
Pecos compact	States of New Mexico and Texas.	Informal	4,524.37	(*)	*4,524.37
Utah:					
Castle Peak	State of Utah and Mormon Church.	Mar. 11, 1918	999.45	999.45	1,998.90
Dixie	Noncooperative				
General reconnaissance	do				
Mammoth reservoir (Rice River).	do				
Price River	do				
Green River water right investigation.	do				
Bear Lake	do				
Provo-Weber	do				
Utah Lake	do				
Juab County	T. C. Winn, et al	June 10, 1919		4,196.68	4,196.68
Green River	Salt Lake Chamber of Commerce.	May 27, 1921	5,247.09	5,247.09	10,494.18
Salt Lake Basin	State of Utah	<div> <div> Jan. 3, 1922 June 1, 1923 Nov. 30, 1923 July 31, 1924 Apr. 30, 1925 </div> <div> } </div> </div>	41,773.04	40,773.04	82,546.08
Cache Valley	do	June 1, 1923	4,244.47	4,244.48	8,488.95
Transmountain diversions.	Noncooperative				
Spanish Fork—Lehi drainage.	do				
Washington:					
Benton	do				
Columbia Basin	do				
Kittitas	Kittitas irrigation district	July 5, 1921		1,000.00	1,000.00
Lower Snake River	State of Washington	Jan. 22, 1920	2,099.49	* 2,000.00	4,099.49
Methow-Okanogan	Noncooperative				
Palouse	do				
Do	State of Washington	Nov. 18, 1913	10,201.92	* 9,999.70	20,201.62
Wapato	Noncooperative				
Priest Rapids	do				
Columbia River Power	Federal Power Commission.	Informal	4,042.95	(*)	4,042.95
Snake and Columbia Rivers.	Noncooperative				

Reclamation with funds appropriated for secondary projects and general investigations
30, 1925—Continued

though not necessarily most important investigation of the project in question. Some of the earlier investor therefore does not mention a large number of specific projects on which work was done. Condition

Additional expenditures by the United States not covered by agreement	Engineer in charge	Date of report	Remarks
\$226.43 522.49 7,235.29	Wiley..... Harper..... Crocker.....	1918..... June 18, 1924..... June 2, 1925.....	Utilization of McKay storage. Utilization of McKay storage. Report covers engineering only, work still in progress.
21.48	Shaw..... Crocker.....	1923-24.....	Work in progress. Horse Heaven project.
110.00 1,367.00	Pease..... Parkhill..... Pease.....	1917-18..... March, 1919..... 1921.....	Covers irrigation development.
	do.....	October, 1921.....	
	Pease-Teeter.....	1923.....	Covers flood control.
	Pease.....	1923.....	
6,906.13	Teeter-Lee.....	1924.....	
7,120.71	Fogg..... Pease.....	1914..... February, 1925.....	* Expenditures by other parties not known.
22,921.23	Drager.....	December, 1920.....	
863.52	Lytel.....	Oct. 2, 1918.....	See also Colorado River tributaries, Arizona, Nevada, Utah, by Newell, September, 1923.
632.59	do.....	1919.....	
404.27	do.....	Aug. 15, 1917.....	
145.40	Walter.....	Apr. 5, 1923.....	
252.74	Lytel.....	1918-19.....	
18,827.72	Swendsen.....	Oct. 11, 1906.....	
141.35	Lytel.....	1918-19.....	
34,049.30	Swendsen.....	Mar. 31, 1905.....	See Salt Lake Basin report by Green for investigations, 1921-1925.
	Lytel.....	February, 1920.....	
	Green.....	December, 1921.....	
	do.....		\$50,640.27 advanced by contractor. Work in progress.
3,555.02	do..... Carroll.....	September, 1924..... November, 1923.....	
500.91	Green.....	May, 1923.....	
11,167.45	Noble.....	1905.....	Also called Ledbetter and Hanford projects.
102,566.20	Gault.....	February, 1925.....	
100,082.73	do..... Rowe.....	March, 1925..... December, 1920, and Feb. 16, 1921.....	Includes \$48,789.74 carried on Yakima project accounts. Use of water investigations. * \$2,000 expended by State.
192.14	Henny.....	Jan. 15, 1920.....	
76,409.01	Anderson.....	Dec. 26, 1904.....	See also Columbia Basin reports.
	McCulloh.....	Jan. 7, 1915.....	See also Columbia Basin reports. * \$9,999.70 expended by State.
36,465.77	Noble.....	December, 1906.....	Part of Yakima projects.
6,216.01	Charles.....	Feb. 24, 1905.....	See also Columbia Basin reports.
	Henny.....	June 30, 1922.....	* Expenditures by others unknown.
82.81			Miscellaneous expenses.

Statement of costs incurred on investigations made by the United States Bureau of
to June

[References to engineers in charge and date of reports in the following statement refer to the most recent. Investigations each covered a relatively large general area containing a number of possible projects and the of accounts will not readily permit segregation of such joint costs]

State and project or investigation	Contractor	Date of agreement	Funds furnished under agreement		
			United States	Contractor	Total
Wyoming:					
Church Butte	Noncooperative				
De Smet	do.				
Fifteen Mile	do.				
Green River	do.				
Lyman	do.				
North Platte River	State of Wyoming	Jan. 15, 1918	\$5,868.66	\$5,868.66	\$11,737.32
		Sept. 23, 1920			
Green River Basin	do.	June 1, 1915	3,681.76	* 3,700.52	7,382.28
Encampment	do.	Apr. 29, 1921	4,883.61	* 4,920.76	9,804.37
Saratoga	do.				
Do.	do.	Mar. 30, 1925			
Alcova-Casper	do.	June 20, 1921	4,809.77	* 10,616.76	15,426.53
Pathfinder pumping	Noncooperative				
North Platte River pumping	State of Wyoming	Mar. 30, 1925	856.93	* 1,062.09	1,919.02
Casper pumping	Noncooperative				
General reconnaissance	do.				
Miscellaneous					
General reconnaissance	do.				
Miscellaneous investigations	do.				
Preliminary investigations	do.				
Experimental investigations	do.				
Grand total			429,440.59	1,646,257.16	1,075,697.75

¹ Senate Joint Resolution, No. 215.

² Includes \$175,517.94 expended directly by States.

³ Includes \$48,789.74 carried in Yakima project accounts.

Reclamation with funds appropriated for secondary projects and general investigations 30, 1925—Continued

though not necessarily most important investigation of the project in question. Some of the earlier investigator therefore does not mention a large number of specific projects on which work was done. Condition

Additional expenditures by the United States not covered by agreement	Engineer in charge	Date of report	Remarks
\$1,442.28	Pease.....	July, 1918.....	See also Green River Basin report by Stubblefield.
8,917.38	Schlecht.....	May 25, 1906.....	
125.06	Sanford.....	June 24, 1919.....	Do.
320.15	Pease.....	July, 1918.....	
2,477.77	Stubblefield.....	March, 1919.....	{ Covers entire North Platte drainage area. * \$5,868.66 expended by State.
-----	Conkling.....	Sept. 4, 1920.....	
-----	Richardson.....	January and October, 1916.	Wyoming cooperative investigations. * \$3,700.52 expended by State.
-----	Bonstedt.....	July, 1922.....	Also known as Big Creek project.
-----	Dunnewald.....	-----	Also known as Pass Creek Flats project. * \$4,920.76 expended by State.
-----	Gault.....	February, 1922.....	Also known as Pass Creek Flats project. Work in progress.
1,568.96	Fritsch.....	Feb. 17, 1916.....	* \$10,616.76 expended by State.
-----	Smith.....	-----	See also Casper and North Platte pumping by Smith.
2,877.99	.....do.....	December, 1924..	Work in progress. Also known as Pathfinder pumping and as Casper pumping projects. * \$1,062.09 expended by State.
2,073.34	-----	-----	-----
6,182.31	Various.....	Various.....	-----
9,729.99	.....do.....	.....do.....	-----
80,488.73	.....do.....	.....do.....	-----
29,569.22	.....do.....	.....do.....	-----
1,605,759.57	-----	-----	-----

BAKER PROJECT, OREGON

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$496,341.52
Disbursements.....	\$2,554.55	
Liabilities outstanding.....	357.45	
		2,912.00

Unencumbered balance, June 30, 1925..... 493,429.52

Fiscal year 1926: Amount specified in appropriation acts (Unexpended balance, fiscal year 1925 appropriation).

Voucher transactions

	Reclamation fund	Increase of compensation (net)	Total
Disbursements and net transfers.....	\$57,758.64	\$1,442.19	\$59,200.83
Less collections.....	879.29		879.29
Net investment, June 30, 1925.....	56,879.35	1,442.19	58,321.54

Cost of investigations

	Fiscal year, 1925	To June 30, 1925
Cost of investigations.....	\$2,911.09	\$60,856.45
Less contributed funds.....		5,000.00
Net cost.....	2,911.09	55,856.45

OWYHEE PROJECT, OREGON

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$316,003.00
Disbursements.....	\$4,446.47	
Liabilities outstanding.....	12.90	
		4,459.37

Unencumbered balance, June 30, 1925..... 311,543.63

Fiscal year 1926: Amount specified in appropriation acts (Unexpended balance, fiscal year 1925 appropriation).

Voucher transactions

Disbursements and net transfers, reclamation fund.....	\$4,407.10
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Cost of investigations

Cost of investigations ¹	\$3,703.04
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SALT LAKE BASIN PROJECT, UTAH

Appropriations

Fiscal year 1925:		
Congressional authorizations.....		\$376,000.00
Disbursements.....	\$7,576.46	
Liabilities outstanding.....	1,652.89	
		9,229.35

Unencumbered balance, June 30, 1925..... 366,770.65

Fiscal year 1926: Amount specified in appropriation acts (Unexpended balance, fiscal year 1925 appropriated).

Voucher transactions

Disbursements and net transfers, reclamation fund.....	\$8,857.22
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Cost of investigations

Cost of investigations ¹	\$9,423.79
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ELWOOD MEAD,
Commissioner of Reclamation.

¹ For other costs, see report for secondary projects.

APPENDIX

CONSOLIDATED FINANCIAL DATA

TABLE 1.—*Consolidated financial statement, June 30, 1925*

DEBIT SIDE

Construction account:			
Primary projects—			
Cost of irrigation works—			
Original construction.....	\$151, 448, 386. 31		
Supplemental construction.....	6, 828, 189. 78		
Value of works taken over.....	1, 899, 839. 11		
Total construction cost.....		\$160, 176, 415. 20	
Operation and maintenance prior to public notice (net).....	2, 376, 947. 59		
Operation and maintenance deficits and arrearages to be paid with construction.....	1, 741, 190. 74	4, 118, 138. 33	
		164, 294, 553. 53	
Less—			
Abandoned works and nonreimbursable cost (net).....	2, 357, 269. 43		
Construction revenues.....	4, 380, 691. 75		
Contributed funds.....	1, 023, 597. 64	7, 761, 558. 82	
Total to be repaid by water users (Table 4).....			\$156, 532, 994. 71
Yuma auxiliary project—		839, 306. 26	
Cost of irrigation works.....		56. 87	
Less: Construction revenues.....			839, 249. 39
Operation and maintenance results (Table 9).....			1, 087, 284. 94
Secondary projects and general investigations:			
Cost of investigations.....		2, 598, 368. 37	
Less: Contributed funds.....		524, 123. 24	
			2, 074, 245. 13
Plant and equipment.....			1, 823, 256. 73
Materials and supplies.....			717, 877. 85
Accounts receivable:			
Current accounts due (Tables 10, 11, 12, 13, 14, 15) ..		9, 478, 168. 91	
Deferred accounts not due.....		96, 278, 809. 17	
			105, 756, 978. 08
Prepaid civil service retirement fund.....			2, 914. 80
Unadjusted debits: General office expense undistributed, disbursement vouchers in transit, etc.....			189, 580. 14
Cash (Table 2):			
Balance on hand, reclamation fund.....	6, 575, 104. 23		
Balance on hand, Yuma auxiliary fund.....	41, 843. 92		
Balance on hand, general investigations fund.....	8, 802. 61		
Balance on hand, Wind River Indian fund.....	303. 61		
		6, 626, 054. 37	
		39, 204. 19	
Collections in transit.....			6, 665, 258. 56
			275, 689, 640. 33
Total debits.....			

TABLE 1.—*Consolidated financial statement, June 30, 1925—Continued*
CREDIT SIDE

Security for repayment of cost of irrigation works:					
Contracted construction repayments (Table 5)			\$122, 556, 694. 59		
Yuma auxiliary contracted repayments			952, 476. 33		\$123, 509, 170. 92
Accounts payable:					
Contractors' earnings			150, 405. 43		
Labor			242, 121. 35		
Purchases			194, 670. 83		
Transportation			201, 746. 50		
Miscellaneous			678, 752. 14		1, 467, 696. 25
Unapplied credits: Forfeitures, penalties, hospital, rentals from withdrawn lands, etc					1, 695, 186. 25
Unadjusted credits: Cost adjustments, collection vouchers in transit, etc					502. 61
Government aid for reclamation of arid lands:					
Reclamation fund (Table 3)			131, 498, 283. 99		
Special funds—					
Judgments, Court of Claims			594, 936. 20		
Rio Grande Dam			1, 000, 000. 00		
General investigations, 1923–December 31, 1924			275, 000. 00		
Increase of compensation			2, 797, 959. 67		
Wind River Indian (River-ton)			359, 479. 65		
Drainage and cut-over lands			99, 815. 08		
Advances to reclamation fund (bond loan)	\$20, 000, 000. 00				
Less: Amount repaid	5, 000, 000. 00				
			15, 000, 000. 00		
Total			151, 625, 474. 59		
Less: Nonreimbursable appropriation, Rio Grande Dam (Table 4)			1, 000, 000. 00		
			150, 625, 474. 59		
Less: Impairment of funds—					
Abandoned construction works (Table 4)	928, 217. 31				
Nonreimbursable construction cost (Table 4)	429, 468. 12				
Deficits, operation and maintenance (Table 9)	250, 704. 86				
			1, 608, 390. 29		149, 017, 084. 30
Total credits					275, 689, 640. 33

TABLE 2.—*Available funds, expenditures, and balances, fiscal year 1925*

	Funds					
	Reclamation	Yuma auxiliary	General investigations	Wind River, Indian (River-ton)	Judgments, Court of Claims	Increase of compensation
Balance on hand July 1, 1924	\$5, 471, 646. 72	\$52, 290. 50	\$91, 987. 17	\$303. 61		
Receipts:						
Proceeds from sale of public lands	757, 109. 97					
Proceeds from sale of town lots	4, 470. 16					
Proceeds from oil leasing act—						
Past production	¹ 15, 273. 98					
Current production	4, 835, 888. 94					
Proceeds from potassium royalties	5, 216. 52					
Proceeds from Federal power licenses	5, 844. 17					
From sale of lands and water rights		¹ 12, 924. 41				
From project collections	7, 152, 487. 18	47, 681. 07	16, 121. 87			
From General Treasury					\$44, 588. 62	\$38, 068. 69
Total	18, 217, 389. 68	87, 047. 16	108, 109. 04	303. 61	44, 588. 62	38, 068. 69
Expenditures:						
Repayment bond loan	1, 000, 000. 00					
Disbursements	10, 642, 285. 45	45, 203. 24	99, 306. 43		44, 588. 62	38, 068. 69
Total	11, 642, 285. 45	45, 203. 24	99, 306. 43		44, 588. 62	38, 068. 69
Balance on hand, June 30, 1925	6, 575, 104. 23	41, 843. 92	8, 802. 61	303. 61		

¹ Contra.

TABLE 3.—Accretions to reclamation fund, by States

States	Sales of public lands		Sales of reclamation town sites		Proceeds from oil leasing act ¹		Potassium royalties and rentals ¹	Total to June 30, 1925
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Past production	Current production		
Alabama.....						\$45,349.50		\$45,349.50
Arizona.....	\$37,945.91	\$2,181,539.75						2,181,539.75
California.....	119,017.29	7,468,389.84						12,251,199.63
Colorado.....	103,238.40	9,808,409.90			\$2,377,819.72	2,379,802.00	\$25,188.07	9,877,094.50
Idaho.....	43,683.29	6,743,013.48	\$316.00	\$177,428.18		68,684.60		6,920,637.77
Kansas.....	56.18	1,033,483.94				• 196.11		1,033,483.94
Louisiana.....								2,108.76
Montana.....	76,987.31	14,815,086.42	2,892.65	125,053.58		2,108.76		15,439,148.01
Nebraska.....	786.67	2,082,192.33				469,008.01		2,082,192.33
Nevada.....	14,418.76	931,439.68						931,817.68
New Mexico.....	98,176.09	5,846,624.41				378.00		5,852,467.51
North Dakota.....	² 179.02	12,204,826.47				5,843.10		12,217,927.22
Oklahoma.....	3,864.58	5,921,707.68				13,100.75		5,921,707.68
Oregon.....	31,560.19	11,675,476.36						11,675,476.36
South Dakota.....	7,928.80	7,690,177.95		74,875.92		152.48		7,765,206.35
Utah.....	87,204.41	3,695,666.26				69,648.51		3,765,314.77
Washington.....	25,999.61	7,290,276.82				9,221.57		7,299,498.39
Wyoming.....	111,421.50	7,776,977.85	1,261.51	209,272.48	2,121,620.27	16,117,487.19		26,225,357.79
Total.....	757,109.97	107,165,289.14	4,470.16	586,630.16	4,499,439.99	19,210,980.58	25,188.07	131,487,527.94
Proceeds, Federal water-power licenses ¹								10,756.05
Grand total.....								131,498,283.99

¹ Totals to June 30, 1925.

Total proceeds for fiscal year 1925:

Oil leasing act, past production.....

Oil leasing act, current production.....

Potassium royalties and rentals.....

Federal water power licenses.....

² Contra.

² \$15,273.98
 4,835,888.94
 5,216.52
 5,844.17

TABLE 4.—Consolidated statement by projects of construction cost of irrigation works, other cost reimbursable with construction, and amount to be repaid by water users

State and project	Construction cost		Operation and maintenance before notice (net)		Operation and maintenance deficits and arrearages		Construction revenues and contributed funds (contra)		Abandoned nonreimbursable cost ¹	Total to be repaid by water users	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925		Fiscal year 1925	To June 30, 1925
Arizona: Salt River.....		\$12,744,222.59		\$115,993.50				\$2,312,096.81	\$382,097.31		\$10,166,021.97
Arizona-California: Yuma.....	\$106,869.49	8,851,759.17	2 1,431.66	371,617.49	\$1,919.39	\$1,945.71	\$2,609.95	158,578.99		\$104,747.27	9,066,743.38
California: Orland.....	1,367.90	1,141,894.39	2 148.50	2 11,878.49			986.16	15,574.72		233.24	1,114,411.18
Colorado: Grand Valley.....	380,834.82	4,633,156.24	2 4,443.83	113,505.23			2,698.62	59,643.70		373,692.37	4,687,017.77
Uncompahgre.....	1,068.61	6,437,912.91	2 3,013.35	301,713.15			2 1,306.64	29,665.24	47,370.81	2 638.10	6,662,590.01
Idaho: American Falls.....	1,662,630.45	3,777,462.02					2 11,038.17	2 191,314.03		1,673,668.62	3,968,776.05
Boise.....	202,495.11	13,915,535.58		422,192.62	9,698.31	9,693.31	12,724.77	207,305.80		199,468.65	14,140,120.71
King Hill.....	12,718.66	1,904,898.80	2 8,553.43				13,121.17	26,028.07		2 8,935.94	1,878,870.73
Mindoka.....	22,966.57	6,607,463.93	2 415.39	155,047.30	8,316.26	20,630.12	70,477.67	1,431,289.17		2 39,610.23	5,351,854.18
Kansas: Garden City.....		342,963.68		52,868.10				61,356.82	334,474.96		
Montana: Huntley.....	84.21	1,498,766.72	2 188.31	2 809.90	9,766.26	10,980.90	227.98	17,218.10		9,434.18	1,491,719.62
Milk River.....	102,143.45	6,680,760.99	34,707.42	423,680.59			1,579.17	63,220.88		135,271.70	7,041,220.70
Sun River.....	48,766.69	4,388,769.78	10,538.95	131,313.56	13,855.09	16,373.99	2 504.63	39,349.62		79,655.36	4,497,107.71
Montana-North Dakota: Lower Yellowstone.....	969.63	3,166,526.77	2 185.32	2 554.18		522,500.05	1,112.34	45,782.25		2 328.03	3,642,690.39
Nebraska-Wyoming: North Platte.....	1,235,717.38	16,384,348.18	84,798.68	581,286.77	68,069.13	150,483.08	2 1,630.07	150,066.77		1,390,145.26	16,966,051.26
Nevada: Newlands.....	52,945.85	7,507,651.51	2 185.60	2 1,540.11	2,134.43	4,157.86	3,370.07	175,505.80		51,524.61	7,334,762.96
New Mexico: Carlsbad.....	19,967.82	1,438,664.72	2 1,919.13	2 13,624.41		1,934.00	868.02	24,029.37		17,180.67	1,402,944.94
Hondo.....		339,491.68	35.49	32,952.01				541.03	371,902.66		
New Mexico-Texas: Rio Grande.....	467,540.58	13,802,248.22	2 19,751.06	2 274,936.78			1,452.64	37,345.60	1,000,000.00	446,336.88	12,489,965.84
North Dakota: Buford-Trenton.....		223,423.06		2 31.75			416.00	1,967.62			
Williston.....	2,072.29	500,855.16		2 165.00		168,471.56	664.03	10,744.83	221,423.69	1,408.26	658,416.89
Oregon: Baker.....	80,856.45	60,856.45					3 5,000.00	5,000.00		55,856.45	55,856.45
Owyhee.....	3,703.04	3,703.04								3,703.04	3,703.04
Umatilla.....	896,602.26	4,277,334.18				190,627.95	4,829.93	27,605.10		891,772.33	4,440,357.03
Oregon-California: Klamath.....	607,568.48	5,074,439.41	2 3,369.34	58,782.93		3,712.03	23,679.98	201,123.39		580,519.16	4,935,810.98

South Dakota: Belle Fourche	3,566,124.41	2,1,989.03	506,436.99	16,565.33	4,054,007.02
Utah:					
Salt Lake Basin	9,423.79				9,423.79
Strawberry Valley	3,499,638.80				3,459,781.24
Washington:					
Okanogan	12,023.04				11,833.11
Yakima	839,261.31				1,417,652.97
Wyoming:					
Riverton	594,242.30				14,119,086.28
Shoshone	256,798.48				2,266,437.49
Total	7,610,029.88	92,275.62	1,741,190.74	5,404,289.39	9,209,592.13
					156,532,994.71
1 Abandoned works:					
Garden City					\$334,474.96
Hondo					371,902.66
Bulford-Trenton					221,423.69
					927,801.31
Nonreimbursable cost:					382,097.31
Salt River					47,370.81
Uncompahgre					429,468.12
Nonreimbursable appropriation: Rio Grande dam					1,000,000.00
2 Contra.					
3 Transferred from secondary project accounts; cost, \$57,945.36; contributed funds, \$5,000. Actual cost for fiscal year, \$2,911.09.					

TABLE 5.—*Consolidated statement of contracted construction repayments*

State and project	Contracted repayments	
	Fiscal year 1925	To June 30, 1925
Arizona: Salt River.....		\$10,166,021.97
Arizona-California: Yuma.....	\$59,976.14	6,001,623.92
California: Orland.....	¹ 357.50	1,119,215.25
Colorado:		
Grand Valley.....		1,000,000.00
Uncompahgre.....		6,713,584.50
Idaho:		
American Falls.....	¹ 1,215,144.00	3,347,638.00
Boise.....	11,306.81	14,467,379.90
King Hill.....		2,000,000.00
Minidoka.....	2,401.77	6,036,921.40
Montana:		
Huntley.....	25,958.56	1,340,448.71
Sun River.....	12,472.09	422,423.13
Montana-North Dakota: Lower Yellowstone.....		3,614,301.81
Nebraska-Wyoming: North Platte.....	5,325,035.63	15,324,986.16
Nevada: Newlands.....	¹ 48,116.77	2,540,333.24
New Mexico: Carlsbad.....	420.00	1,424,312.75
New Mexico-Texas: Rio Grande.....	5,850,000.00	13,500,000.00
North Dakota: Williston.....		489,275.30
Oregon: Umatilla.....	1,023,750.00	4,423,823.97
Oregon-California: Klamath.....	29,359.00	3,994,716.60
South Dakota: Belle Fourche.....		4,345,277.42
Utah: Strawberry Valley.....	12,161.26	3,103,416.96
Washington:		
Okanogan.....		1,497,840.29
Yakima.....	249,015.15	9,917,303.60
Wyoming: Shoshone.....	¹ 136,725.45	5,765,849.71
Total.....	11,178,899.07	122,556,694.59

¹ Contra.

TABLE 6.—Consolidated statement, by projects, of operation and maintenance cost, operation and maintenance returns, and other credits and results, calendar year 1924

State and project	Cost	Operation and maintenance returns				Other credits		Results, excess (+) and deficit (—)
		Charges contracted	Penalties	Discounts (contra)	Miscellaneous revenues	Deficits uncollectible	Amount to be repaid with construction	
Arizona: Yuma auxiliary.....	\$41,519.13	\$56,128.92	\$85.75	¹ \$3.50	\$75.00	-----	-----	+ \$14,774.04
Arizona - California: Yuma.....	379,998.74	396,107.77	16,419.60	6,193.53	¹ 64,369.32	-----	\$1,919.39	-36,114.83
California: Orland.....	28,365.45	33,276.46	34.47	875.30	16.45	-----	-----	+4,086.63
Colorado: Uncompahgre.....	141,351.37	136,990.85	494.45	2,801.77	3,269.15	-----	-----	-3,398.69
Idaho:								
Boise.....	165,269.07	170,302.72	18,177.84	1,843.29	8,456.41	-----	-----	+29,824.61
Boise (drainage).....	145,629.29	138,102.69	14,137.95	1,040.32	-----	-----	-----	+5,571.03
King Hill.....	29,348.61	33,784.21	-----	-----	-----	-----	-----	+4,435.60
Minidoka.....	117,887.42	117,433.07	2,590.24	958.89	169.26	-----	-----	+1,346.26
Montana:								
Huntley.....	36,035.14	25,386.03	2,284.02	1,037.38	436.70	-----	9,766.26	+800.49
Sun River.....	9,770.22	¹ 3,019.80	905.69	184.91	165.51	-----	13,855.09	+1,951.36
Montana - North Dakota: Lower Yellowstone.....	70,132.82	69,779.74	-----	-----	353.08	-----	-----	-----
Nebraska-Wyoming: North Platte.....	205,966.32	149,292.47	689.96	1,648.02	1,968.48	-----	68,069.13	+12,405.70
Nevada: Newlands.....	187,337.13	183,170.94	3,591.62	2,407.10	480.90	-----	2,134.43	-366.34
New Mexico: Carlsbad.....	42,374.33	51,227.06	6,973.29	1,871.82	2,626.95	-----	-----	+16,581.15
New Mexico-Texas: Rio Grande.....	262,886.81	255,774.69	¹ 256.50	-----	6,723.00	-----	-----	-645.64
North Dakota:								
Buford-Trenton.....	-----	-----	-----	-----	-----	\$1,304.27	¹ 1,304.27	-----
Williston.....	75,701.98	-----	-----	-----	46,501.11	-----	-----	-29,200.87
Oregon: Umatilla.....	34,049.37	32,684.10	28.13	7.74	1,735.65	-----	-----	+390.77
Oregon - California: Klamath.....	67,978.08	57,068.20	87.81	132.54	427.89	-----	-----	-10,526.72
South Dakota: Belle Fourche.....	73,533.43	75,000.00	-----	-----	1,786.24	-----	-----	+3,252.81
Utah: Strawberry Valley.....	23,694.58	13,965.67	2,783.46	1,000.27	6,400.61	-----	1,346.33	-198.78
Washington:								
Okanogan.....	65,112.33	47,077.87	1,990.87	6.00	566.45	-----	-----	-15,483.14
Yakima.....	239,600.32	260,100.78	1,966.09	4,214.99	5,849.08	-----	¹ 194.90	+23,905.74
Wyoming: Shoshone.....	57,839.83	369.31	1,038.66	532.55	8,487.91	-----	44,759.28	-3,717.22
Total.....	2,501,381.77	2,300,003.73	74,023.40	26,752.92	32,126.51	1,304.27	140,350.74	+19,673.96

¹ Contra.

TABLE 7.—Consolidated statement, by projects, of operation and maintenance cost, operation and maintenance returns, and other credits and results to December 31, 1924

State and project	Cost	Operation and maintenance returns				Other credits		Results, excess (+) and deficit (—)
		Charges contracted	Penalties	Discounts (contra)	Miscellaneous revenues	Deficits uncollectible	Amounts to be repaid with construction	
Arizona: Yuma auxiliary.....	\$108, 144. 18	\$125, 878. 96	\$537. 74	\$1, 106. 79	\$150. 00			+\$17, 315. 73
Arizona-California: Yuma.....	2, 385, 132. 50	1, 785, 730. 48	48, 732. 53	20, 039. 85	103, 009. 99		\$1, 945. 71	—465, 753. 64
California: Orland.....	262, 924. 20	278, 982. 19	74. 44	12, 982. 75	1, 551. 44			+4, 701. 12
Colorado: Uncompahgre.....	281, 845. 74	295, 386. 35	494. 45	5, 983. 39	4, 049. 46			+12, 101. 13
Idaho:								
Boise.....	1, 903, 115. 95	1, 913, 615. 26	43, 998. 51	44, 886. 34	122, 426. 67			+132, 038. 15
Boise (drainage).....	332, 222. 08	549, 491. 48	25, 339. 80	4, 853. 44				+237, 755. 76
King Hill.....	115, 012. 05	123, 672. 20		1, 519. 05				+7, 141. 10
Minidoka.....	1, 663, 569. 10	1, 619, 416. 30	27, 354. 67	20, 179. 49	98, 697. 31		12, 313. 86	+74, 033. 55
Montana:								
Huntley.....	911, 501. 99	491, 029. 45	10, 917. 85	8, 707. 87	8, 999. 56		10, 980. 90	—398, 352. 10
Sun River.....	218, 120. 67	170, 418. 86	3, 469. 28	3, 192. 24	2, 479. 34		16, 373. 99	—28, 571. 44
Montana-North Dakota: Lower Yellowstone.....	970, 835. 01	323, 340. 30	2. 59	4. 63	124, 996. 70		522, 500. 05	—
Nebraska-Wyoming: North Platte.....	2, 120, 374. 49	2, 085, 970. 82	26, 841. 91	34, 039. 28	23, 703. 84		150, 483. 08	+132, 585. 88
Nevada: Newlands.....	1, 285, 224. 83	1, 194, 706. 08	16, 562. 00	20, 251. 48	19, 348. 87		4, 157. 36	—70, 702. 00
New Mexico: Carlsbad.....	556, 545. 63	553, 468. 44	23, 538. 90	9, 187. 30	15, 338. 03		1, 934. 00	+28, 546. 44
New Mexico-Texas: Rio Grande.....	904, 010. 38	899, 701. 72	1, 426. 46	4, 486. 44	7, 368. 64			—
North Dakota:								
Buford-Trenton.....	74, 781. 07	2, 317. 41			10. 00	\$72, 453. 66		—
Williston.....	841, 239. 68	26, 677. 75	1, 918. 76		439, 401. 99	178, 667. 20	168, 471. 56	—26, 102. 42
Oregon: Umatilla.....	622, 478. 67	400, 890. 49	6, 375. 70	3, 294. 17	38, 244. 74		190, 627. 95	+10, 366. 04
Oregon-California: Klamath.....	686, 586. 36	675, 100. 65	2, 817. 88	4, 645. 96	12, 831. 90		3, 712. 03	+3, 230. 14
South Dakota: Belle Fourche.....	1, 088, 283. 37	638, 721. 89	31, 955. 32	9, 241. 55	12, 477. 44		506, 436. 99	+32, 066. 72
Utah: Strawberry Valley.....	396, 971. 96	385, 231. 29	6, 255. 67	10, 280. 16	17, 083. 43		1, 346. 33	+2, 664. 60
Washington:								
Okanogan.....	452, 677. 59	358, 970. 36	9, 438. 24	365. 03	68, 119. 83		9, 746. 79	—6, 767. 40
Yakima.....	2, 773, 837. 00	2, 656, 665. 19	39, 770. 34	32, 929. 20	94, 066. 00		77, 113. 00	+60, 848. 33
Wyoming: Shoshone.....	715, 507. 93	671, 518. 87	10, 584. 38	10, 644. 70	23, 150. 22		44, 907. 03	+24, 007. 87
Total.....	21, 670, 942. 43	18, 226, 902. 79	338, 407. 42	262, 821. 11	1, 237, 435. 40	251, 120. 86	1, 723, 050. 63	—156, 846. 44
Total, Table No. 7, above.....	21, 670, 942. 43	18, 226, 902. 79	338, 407. 42	262, 821. 11	1, 237, 435. 40	251, 120. 86	1, 723, 050. 63	—156, 846. 44
Total, Table No. 7, twenty-third annual report.....	19, 017, 272. 17	15, 767, 261. 03	263, 932. 03	233, 438. 85	1, 205, 233. 89	249, 816. 59	1, 582, 699. 89	—181, 767. 59
Difference.....	2, 653, 670. 26	2, 459, 641. 76	74, 475. 39	29, 382. 26	32, 201. 51	1, 304. 27	140, 350. 74	+24, 921. 15
Total, Table 6.....	2, 501, 381. 77	2, 300, 003. 73	74, 023. 40	26, 752. 92	32, 126. 51	1, 304. 27	140, 350. 74	+19, 673. 96
Difference.....	152, 288. 49	159, 638. 03	451. 99	2, 629. 34	75. 00	0. 00	0. 00	+5, 247. 19
Reconciled as follows (previous years' transactions included above but not included in Table 6):								
Yuma auxiliary.....	66, 625. 05	69, 750. 04	451. 99	1, 110. 29	75. 00			+2, 541. 69
King Hill.....	85, 663. 44	89, 887. 99		1, 519. 05				+2, 705. 50

TABLE 8.—Consolidated statement by projects of operation and maintenance cost, operation and maintenance returns and other credits, and results, fiscal year 1925

State and project	Cost	Operation and maintenance returns				Other credits, amount to be repaid with construction	Results, excess (+) and deficit (—)
		Charges contracted	Penalties	Discounts (contra)	Miscellaneous revenues		
Arizona: Yuma auxiliary.....	\$51,331.15	\$51,828.60			\$507.00		+\$1,004.45
Arizona-California: Yuma.....	308,151.17	326,710.23	\$10,489.44	\$8,390.34	3,621.85	\$1,919.39	+26,199.40
California: Orland.....	99,737.79	33,276.44	59.62	917.00	193.20		+2,874.47
Colorado: Uncompahgre.....	138,105.43	137,204.91	2,116.94	2,745.63	3,499.38		+1,970.17
Idaho:							
Boise.....	186,031.39	166,899.67	32,280.38	1,220.44	7,910.02	9,698.31	+29,536.55
Boise (drainage).....	82,399.93	138,491.94	7,343.41	1,108.77			+62,326.65
Klug Hill.....	34,512.59	30,606.97					-3,905.62
Minidoka.....	118,290.32	98,754.70	702.57	1,278.96	169.26	8,316.26	-11,626.49
Montana:							
Huntley.....	36,300.45	26,019.59	1,781.91	979.15	444.06	9,766.26	+732.22
Sun River.....	10,833.99	12,287.40	2,456.19	186.94	187.91	13,855.09	+3,140.86
Montana-North Dakota: Lower Yellowstone.....	79,391.21	69,779.74			442.43		-9,169.04
Nebraska-Wyoming: North Platte.....	311,046.23	218,475.66	204.67	1,762.73	1,680.80	68,069.13	-24,378.70
Nevada: Nevada.....	148,527.03	157,040.19	5,768.08	2,366.69	4,850.90	2,134.43	+18,899.88
New Mexico: Carlsbad.....	41,182.92	51,227.06	3,497.10	1,870.15	2,310.47		+13,981.56
New Mexico-Texas: Rio Grande.....	309,859.14	254,332.81			6,913.50		-48,612.83
North Dakota: Williston.....	80,091.89	29,200.87			47,048.63		-3,842.49
Oregon: Umatilla.....	31,041.53	32,684.10	4.29	11.54	1,148.38		+2,783.50
Oregon-California: Klamath.....	73,871.60	59,453.51	334.20	108.31	1,239.88		-12,992.32
South Dakota: Belle Fourche.....	79,246.27	75,000.00	1,400.25		2,358.96		-2,317.36
Utah: Strawberry Valley.....	21,115.39	14,685.67	2,514.42	997.56	6,236.66	1,346.33	+2,669.93
Washington:							
Okanogan.....	65,898.77	47,744.37	2,821.22	6.00	410.40		-14,928.78
Yakima.....	247,935.39	298,099.38	6,365.36	3,825.15	6,019.26	124.34	+18,699.12
Wyoming: Shoshone.....	69,375.32	11,367.59	1,201.62	334.09	8,204.42	44,759.28	-16,911.68
Total.....	2,554,327.10	2,273,861.42	79,511.17	28,109.45	105,397.07	159,840.14	+36,173.25

1 Contra.

TABLE 9.—Consolidated statement by projects of operation and maintenance cost, operation and maintenance returns and other credits, and results, to June 30, 1925

State and project	Cost	Operation and maintenance returns				Other credits		Results, excess (+) and deficit (—)
		Charges con- tracted (†)	Penalties	Discounts (contra)	Miscellaneous revenues	Deficits uncollectible	Amount to be repaid with construction	
Arizona: Yuma Auxiliary.....	\$139,979.04	\$171,551.96	\$537.74	\$1,106.79	\$657.00	-----	-----	+\$31,660.87
Arizona-California: Yuma.....	2,598,755.93	1,794,260.95	55,508.08	27,849.73	111,572.62	-----	-----	—593,318.30
California: Orland.....	279,856.89	278,982.17	125.34	13,025.94	1,730.69	-----	-----	—12,044.63
Colorado: Uncompahgre.....	357,842.60	295,046.36	2,296.19	6,057.65	6,761.23	-----	-----	—59,796.47
Idaho:								
Boise.....	2,013,457.39	1,921,217.53	59,487.33	45,315.85	123,469.30	-----	9,698.31	+55,099.23
Boise (drainage).....	392,222.20	618,827.21	31,889.77	5,402.79	-----	-----	-----	+253,091.99
King Hill.....	133,923.64	124,951.23	-----	1,519.05	1,519.05	-----	-----	—10,491.46
Minidoka.....	1,721,468.38	1,639,073.45	27,759.29	20,566.49	98,697.31	-----	20,630.12	+44,125.30
Montana:								
Huntley.....	927,319.18	490,325.04	11,994.26	8,737.94	9,450.27	-----	-----	—413,306.65
Sun River.....	225,612.66	170,414.46	5,433.11	3,217.70	2,504.62	-----	-----	—34,104.18
Montana-North Dakota: Lower Yellowstone.....	1,013,561.80	323,340.30	2.59	4.63	125,094.20	-----	-----	—42,629.29
Nebraska-Wyoming: North Platte.....	2,322,196.51	2,196,206.15	26,907.37	34,324.56	24,891.64	-----	-----	+41,967.17
Nevada: Newlands.....	1,331,907.33	1,168,364.21	21,213.72	20,260.06	23,976.87	-----	-----	—134,455.23
New Mexico: Carlisbad.....	579,720.13	553,468.44	24,812.17	9,619.38	16,608.09	-----	1,934.00	+7,483.19
New Mexico-Texas: Rio Grande.....	1,075,650.44	899,701.72	1,426.46	4,486.44	7,559.14	-----	-----	—171,449.56
North Dakota:								
Buford-Trenton.....	74,781.07	2,317.41	-----	-----	10.00	\$72,453.66	-----	—10,318.62
Williston.....	877,401.13	55,878.62	1,918.76	-----	-----	178,607.20	-----	—7,701.39
Oregon: Umatilla.....	641,054.56	400,890.49	6,375.70	3,305.71	38,774.74	-----	190,627.95	—41,363.63
Oregon-California: Klamath.....	731,662.90	675,085.65	3,103.71	4,645.96	13,043.84	-----	3,712.03	+98,247.38
South Dakota: Belle Fourche.....	1,123,452.16	638,721.89	31,955.32	9,241.55	13,826.89	-----	506,436.99	—7,220.26
Utah: Strawberry Valley.....	406,653.99	384,866.29	6,433.26	10,570.41	17,358.26	-----	1,346.33	—29,273.42
Washington:								
Okanogan.....	477,762.69	358,970.36	11,647.32	365.03	68,489.83	-----	9,746.79	+69.57
Yakima.....	2,908,812.25	2,723,586.62	44,826.93	35,373.44	98,603.17	-----	77,238.54	—11,556.55
Wyoming: Shoshone.....	754,482.58	668,930.17	11,379.93	10,677.74	28,386.64	-----	44,907.03	—1,087,284.94
Total.....	23,039,547.45	18,554,978.68	387,034.35	275,674.84	1,293,612.72	251,120.86	1,741,190.74	—1,087,284.94
Total Table No. 9, above.....	23,039,547.45	18,554,978.68	387,034.35	275,674.84	1,293,612.72	251,120.86	1,741,190.74	—1,087,284.94
Total Table No. 9, twenty-third annual report.....	20,297,161.41	16,067,049.64	306,985.44	244,939.55	1,188,065.65	251,120.86	1,581,350.60	—1,147,328.77
Difference.....	2,742,386.04	2,487,929.04	80,048.91	30,735.29	105,547.07	-----	159,840.14	+60,243.83
Total Table No. 8.....	2,554,327.10	2,273,861.42	79,511.17	28,109.45	105,397.07	-----	159,840.14	+36,173.25
Difference.....	188,058.94	214,067.62	537.74	2,625.84	150.00	-----	-----	+24,070.58
Reconciled as follows (previous years' transactions in- cluded in Table 9, but not in Table 8):								
Yuma Auxiliary.....	88,647.89	119,723.36	537.74	1,106.79	150.00	-----	-----	+30,656.42
King Hill.....	99,411.05	94,344.26	-----	1,519.05	-----	-----	-----	—6,585.84

† Includes charges to Dec. 31, 1924, only.

TABLE 10.—Accounts receivable, construction water-right charges (including Warren Act contract charges and contributed funds)

State and project	Due		Collected			Uncollected June 30, 1925 ¹
	Fiscal year 1925	To June 30, 1925 ¹	Cash		Other credits to June 30, 1925	
			Fiscal year 1925	To June 30, 1925		
Arizona:						
Salt River.....	\$609,961.32	\$2,306,883.96	\$609,961.32	\$2,306,883.96	-----	-----
Yuma auxiliary.....	² 951,896.33	951,896.33	² 685,989.45	685,989.45	-----	\$265,906.88
Arizona-California: Yuma.....	312,819.92	1,885,461.27	359,848.34	1,751,814.10	\$4,024.28	129,622.89
California: Orland.....	66,455.68	371,285.58	36,659.79	340,263.58	-----	31,022.00
Colorado: Uncompahgre.....	106,124.59	370,622.96	23,818.90	77,833.69	43,265.88	249,523.39
Idaho:						
American Falls.....	2,005,684.25	2,039,291.25	1,536,620.91	1,570,227.91	-----	469,063.34
Boise.....	674,171.98	3,082,724.64	226,621.13	1,834,744.00	25,092.00	1,222,888.64
King Hill.....	48,025.66	48,025.66	8,025.66	8,025.66	-----	40,000.00
Minidoka.....	329,554.92	3,511,965.72	125,496.64	2,770,978.27	154,434.31	586,553.14
Montana:						
Huntley.....	31,377.69	449,025.54	18,580.32	395,965.18	502.21	52,558.15
Sun River.....	13,752.23	180,605.03	7,607.35	156,254.31	425.09	23,925.63
Montana-North Dakota:						
Lower Yellowstone.....	32,635.48	102,057.96	2,987.10	50,863.32	-----	51,194.64
Nebraska-Wyoming: North Platte.....	335,183.31	3,161,278.93	45,427.75	1,822,467.76	35,697.27	1,303,113.90
Nevada: Newlands.....	44,903.31	637,095.28	31,912.59	577,074.70	7,805.82	52,214.76
New Mexico: Carlsbad.....	58,099.37	541,514.62	67,359.65	527,507.81	-----	14,006.81
New Mexico-Texas: Rio Grande.....	197,330.40	472,345.20	197,330.40	472,345.20	-----	-----
Oregon: Umatilla.....	82,441.12	566,223.80	6,269.03	388,677.65	-----	177,546.15
Oregon-California: Klamath.....	70,283.48	692,692.51	71,189.26	661,344.95	-----	31,347.56
South Dakota: Belle Fourche.....	199,428.26	659,294.96	³ 45,999.89	471,758.05	266.57	187,270.34
Utah: Strawberry Valley.....	155,419.90	765,319.27	76,841.57	556,638.18	-----	208,681.09
Washington:						
Okanogan.....	14,617.37	81,661.45	1,076.25	64,814.40	-----	16,847.05
Yakima.....	443,174.89	4,136,709.67	268,375.96	3,765,090.95	36,047.07	335,571.65
Wyoming: Shoshone.....	54,128.79	968,911.45	5,214.98	630,856.92	2,424.66	335,629.87
Total.....	6,837,470.25	27,982,893.04	4,459,214.24	21,888,420.00	⁴ 309,985.16	5,784,487.88
Paid in advance of due dates.....	-----	-----	⁵ 469,974.93	⁵ 1,003,580.94	⁶ 34,387.93	-----
Refunds.....	-----	-----	⁵ 3,567.64	⁵ 24,519.63	-----	-----
Total collections.....	-----	-----	4,932,756.81	22,916,520.57	344,373.09	-----

¹ Includes charges deferred under Relief Act of May 9, 1924. See table, p. 10.² Actual transactions for year; due \$158,700.41 (contra); collected \$14,083.65 (contra).³ Transferred from advance payments; no collections during year.⁴ Other credits for fiscal year, \$19,190.62. For details see project statements.⁵ For details see project statements.⁶ Decrease for fiscal year, \$6,590.80. For details see project statements.

TABLE 11.—Accounts receivable, operation and maintenance charges (after public notice)

State and project	Due		Collected			Uncollected June 30, 1925 ¹
	Fiscal year 1925	To June 30, 1925 ¹	Cash		Other credits to June 30, 1925	
			Fiscal year 1925	To June 30, 1925		
Arizona: Yuma auxiliary.....	² \$171,551.96	\$171,551.96	² \$94,745.56	\$94,745.56	\$1,106.79	\$75,699.61
Arizona-California: Yuma.....	328,629.62	1,794,260.95	299,856.69	1,590,520.94	32,974.14	170,765.87
California: Orland.....	33,276.44	278,982.17	25,775.49	259,189.39	13,025.94	6,766.84
Colorado: Uncompahgre.....	137,204.91	295,046.36	69,196.11	152,119.47	12,803.75	130,123.14
Idaho:						
Boise.....	166,899.67	1,921,217.53	50,661.89	1,413,485.78	45,315.85	462,415.90
Boise (drainage).....	138,491.94	618,827.21	75,820.45	381,578.96	5,402.79	231,845.46
King Hill.....	³ 124,951.23	124,951.23	³ 59,032.07	59,032.07	1,519.05	64,400.11
Minidoka.....	116,732.83	1,619,317.85	61,669.23	1,301,406.05	73,891.11	244,020.69
Montana:						
Huntley.....	35,785.85	490,325.04	30,572.87	382,384.18	9,481.13	98,459.73
Sun River.....	11,567.69	170,414.46	7,909.57	139,786.60	3,493.51	27,134.35
Montana-North Dakota:						
Lower Yellowstone.....	47,441.34	291,266.59	1,797.24	52,733.72	4.63	238,528.24
Nebraska-Wyoming: North Platte.....	218,475.66	2,196,206.15	157,729.96	1,522,941.53	44,715.01	628,549.61
Nevada: Newlands.....	109,605.48	1,023,295.07	98,142.62	874,791.42	32,023.37	116,480.28
New Mexico: Carlsbad.....	51,227.06	553,468.44	62,605.57	532,744.90	9,619.33	11,104.16
New Mexico-Texas: Rio Grande.....	211,833.40	809,145.80	211,877.10	797,571.50	4,486.44	7,087.86
North Dakota:						
Buford-Trenton.....		2,317.41		2,317.41		
Williston.....	29,200.87	55,878.62	11,535.57	38,213.32		17,665.30
Oregon: Umatilla.....	40,820.21	363,203.94	27,445.70	311,315.25	3,305.71	48,582.98
Oregon-California: Klamath.....	64,394.99	613,364.88	58,615.39	547,844.04	30,239.91	35,280.93
South Dakota: Belle Fourche.....	76,285.48	601,558.31	⁴ 22,771.80	483,342.32	9,376.82	109,139.17
Utah: Strawberry Valley.....	41,032.00	360,255.46	24,274.71	296,839.49	10,570.41	52,845.56
Washington:						
Okanogan.....	35,983.28	319,506.78	3,992.62	268,401.09	2,620.61	48,485.08
Yakima.....	258,099.38	2,723,586.62	205,558.80	2,493,816.35	36,418.78	193,351.49
Wyoming: Shoshone.....	⁵ 1,367.59	668,930.17	17,701.94	439,093.25	19,701.35	210,135.57
Total.....	2,448,123.70	18,067,179.00	1,679,288.95	14,436,214.59	⁶ 402,096.48	3,228,867.93
Paid in advance of due dates.....			⁷ 24,028.10	⁷ 36,429.75	⁸ 787.81	
Penalties and interest.....	⁷ 80,048.91	⁷ 387,034.35	⁷ 47,255.27	⁷ 333,288.02	⁹ 13,163.72	⁷ 35,582.61
Refunds.....			⁷ 687.43	⁷ 13,437.45		
Total collections.....			1,703,203.55	14,819,369.81	421,048.01	

¹ Includes charges deferred under Relief Act of May 9, 1924. See table, p. 10.² Actual transactions for fiscal year; due, \$51,823.60; collected, \$40,090.03.³ Actual transactions for fiscal year; due, \$30,606.97; collected, \$1,059.97.⁴ Transferred from advance payments. No collections during fiscal year.⁵ Contra.⁶ Other credits for fiscal year, \$41,616.52. For details see project statements.⁷ For details see project statements.⁸ Decrease for year, \$18.25. For details see project statements.⁹ Decrease for year, \$838.72. For details see project statements.

TABLE 12.—*Accounts receivable, rentals of irrigation water*

State and project	Due		Collected			Uncollected June 30, 1925 ¹
	Fiscal year 1925	To June 30, 1925 ¹	Cash		Other credits to June 30, 1925	
			Fiscal year 1925	To June 30, 1925		
Arizona: Salt River.....		\$2, 246, 726. 01		\$2, 246, 726. 01		
Arizona: Yuma auxiliary.....	² \$697. 00	697. 00	² \$265. 00	265. 00		\$432. 00
Arizona-California: Yuma.....	2, 028. 71	446, 327. 44	1, 664. 58	441, 863. 87	\$292. 01	4, 171. 56
California: Orland.....	220. 50	120, 604. 50	220. 50	120, 604. 50		
Colorado:						
Grand Valley.....	52, 244. 23	327, 723. 32	50, 655. 85	295, 184. 56	5, 455. 13	27, 083. 63
Uncompahgre.....	6, 517. 99	1, 195, 632. 14	10, 016. 07	1, 164, 281. 63	12, 978. 59	18, 371. 92
Idaho:						
Boise.....	7, 910. 02	762, 203. 77	7, 271. 44	738, 279. 05	4, 720. 50	19, 204. 22
King Hill.....	^{3, 4} 88, 368. 94		^{3, 4} 50, 515. 83			
Minidoka.....	584. 65	272, 607. 98	716. 32	269, 373. 75	3, 234. 23	
Montana:						
Huntley.....	540. 72	7, 777. 45	606. 95	7, 377. 59		399. 86
Milk River.....	18, 026. 23	210, 085. 89	19, 212. 72	191, 374. 35	1, 174. 78	17, 536. 76
Sun River.....	19, 284. 57	71, 838. 74	16, 886. 32	42, 758. 55	921. 30	28, 158. 89
Montana-North Dakota:						
Lower Yellowstone.....	262. 50	123, 850. 49	377. 47	122, 445. 73		1, 404. 76
Nebraska-Wyoming: North						
Platte.....	65, 359. 88	287, 943. 25	71, 330. 96	279, 927. 40	10. 00	8, 005. 85
Nevada: Newlands.....	5, 036. 50	24, 397. 77	659. 00	18, 217. 92	6, 176. 85	3. 00
New Mexico:						
Carlsbad.....	4, 164. 04	26, 097. 05	4, 164. 04	26, 097. 05		
Hondo.....	² 35. 49	9, 129. 70		9, 129. 70		
New Mexico-Texas: Rio						
Grande.....	26, 515. 56	1, 144, 918. 68	37, 399. 20	1, 118, 215. 51		26, 703. 17
North Dakota:						
Buford-Trenton.....		31. 75		31. 75		
Williston.....		2, 117. 28		2, 117. 28		
Oregon: Umatilla.....	837. 50	34, 145. 54	837. 50	34, 145. 54		
Oregon-California: Klamath.	8, 724. 08	52, 705. 39	8, 788. 46	52, 580. 89		124. 50
South Dakota: Belle						
Fourche.....	636. 07	6, 000. 89	636. 07	5, 833. 09	17. 80	150. 00
Utah: Strawberry Valley....	5, 734. 90	14, 298. 54	5, 734. 90	14, 298. 54		
Washington:						
Okanogan.....	370. 00	109, 614. 48	437. 60	106, 660. 29	2, 584. 19	370. 00
Yakima.....	3, 481. 44	147, 367. 16	3, 195. 26	145, 940. 70		1, 426. 46
Wyoming:						
Riverton.....	150. 00	261. 75	150. 00	261. 75		
Shoshone.....	7, 779. 17	25, 427. 69	7, 650. 53	25, 159. 00	55. 92	212. 77
Total.....	148, 701. 83	7, 670, 531. 65	198, 360. 91	7, 479, 151. 00	⁵ 37, 621. 30	153, 759. 35

¹ Includes charges deferred under Relief Act of May 9, 1924. See table, p. 10.² Actual transactions for year, due \$527, collected, \$95.³ Contra.⁴ Transferred to operation and maintenance.⁵ Other credits for fiscal year, \$7,354.72. For details see project statements.

TABLE 13.—*Accounts receivable, rentals of power and light*

State and project	Due		Collected			Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits to June 30, 1925	
			Fiscal year 1925	To June 30, 1925		
Arizona: Salt River		\$998, 411. 03		\$998, 411. 03		
Idaho:						
Boise	\$11, 000. 00	139, 169. 91		96, 424. 61	\$42, 745. 30	
Minidoka	108, 243. 87	907, 290. 66	\$105, 489. 47	876, 309. 74	7, 274. 16	\$23, 706. 76
Nebraska-Wyoming: North Platte	39, 059. 29	152, 923. 87	31, 848. 33	129, 108. 76	19, 902. 00	3, 913. 11
Nevada: Newlands	13, 610. 94	216, 448. 31	13, 593. 35	189, 752. 42	25, 505. 75	1, 190. 14
New Mexico-Texas: Rio Grande		2, 243. 33		2, 243. 33		
North Dakota: Williston	46, 630. 48	456, 566. 68	46, 411. 48	453, 091. 48		3, 475. 20
Oregon-California: Klamath		7, 697. 18		7, 697. 18		
Utah: Strawberry Valley	25, 823. 45	177, 333. 10	23, 237. 01	173, 198. 73		4, 134. 37
Washington:						
Okanogan		1, 754. 71		1, 754. 71		
Yakima		3, 635. 33		3, 635. 33		
Wyoming:						
Riverton	3, 926. 91	3, 926. 91	3, 000. 79	3, 000. 79		926. 12
Shoshone	9, 452. 91	24, 090. 25	9, 359. 83	23, 329. 27	16. 00	744. 98
Total	257, 747. 85	3, 091, 491. 27	232, 940. 26	2, 957, 957. 38	1 95, 443. 21	38, 090. 68

¹ Other credits for fiscal year, \$19,118.15.

TABLE 14.—*Accounts receivable, rentals of grazing and farming lands*

State and project	Due		Collected			Uncollected June 30, 1925
	Fiscal year 1925	To June 30, 1925	Cash		Other credits to June 30, 1925	
			Fiscal year 1925	To June 30, 1925		
Arizona: Salt River		\$19, 373. 14		\$19, 373. 14		
Arizona-California: Yuma	\$3, 118. 60	16, 975. 62	\$2, 998. 60	16, 702. 45		\$273. 17
California: Orland		79. 50		79. 50		
Colorado:						
Grand Valley	65. 00	344. 00	77. 00	294. 00	\$7. 50	42. 50
Uncompahgre	45. 00	242. 45	45. 00	242. 45		
Idaho:						
Boise	882. 80	21, 551. 00	281. 50	20, 861. 00		690. 00
Minidoka	766. 69	35, 138. 85	826. 06	31, 033. 99		4, 104. 86
Montana:						
Huntley	953. 56	13, 627. 78	902. 93	13, 146. 06		481. 72
Milk River	3, 813. 89	34, 728. 23	3, 813. 89	34, 304. 58	38. 88	384. 77
Sun River	3, 304. 27	37, 429. 10	3, 519. 58	34, 333. 68		3, 095. 42
Montana - North Dakota:						
Lower Yellowstone	168. 68	3, 277. 63	273. 68	3, 277. 63		
Nebraska-Wyoming: North Platte	6, 710. 62	89, 780. 70	7, 304. 45	84, 861. 83		4, 918. 87
Nevada: Newlands	5, 824. 42	35, 450. 82	4, 544. 54	32, 254. 44		3, 196. 38
New Mexico: Carlsbad	476. 18	13, 642. 42	361. 62	12, 993. 42		649. 00
New Mexico-Texas: Rio Grande	160. 00	2, 111. 70	111. 50	2, 063. 20		48. 50
North Dakota:						
Buford-Trenton		423. 93		423. 93		
Williston		249. 98		249. 98		
Oregon: Umatilla	439. 20	2, 540. 75	266. 20	2, 317. 75		223. 00
Oregon-California: Klamath	24, 984. 30	201, 749. 45	25, 520. 30	201, 665. 45	84. 00	
South Dakota: Belle Fourche	345. 17	987. 11	247. 57	885. 51		101. 60
Utah: Strawberry Valley	15, 470. 70	166, 751. 06	15, 470. 70	166, 751. 06		
Washington:						
Okanogan	84. 00	856. 50	84. 00	856. 50		
Yakima	1, 970. 19	25, 031. 69	2, 168. 19	24, 820. 49		211. 20
Wyoming: Shoshone	1, 038. 50	10, 628. 11	1, 017. 50	10, 397. 11		231. 00
Secondary projects	11, 895. 27	174, 922. 26	12, 465. 44	132, 003. 79	42, 497. 67	420. 80
Total	82, 517. 04	907, 893. 78	82, 301. 25	846, 192. 94	1 42, 628. 05	19, 072. 79

¹ Other credits for fiscal year, \$7.50.

TABLE 15.—Accounts receivable, miscellaneous and sundry

State and project	Amount	State and project	Amount
Arizona: Yuma auxiliary	\$1,984.70	New Mexico-Texas: Rio Grande	\$450.13
Arizona-California: Yuma	4,481.66	North Dakota: Williston	81.49
Colorado:		Oregon: Umatilla	1,293.57
Grand Valley	32.72	Oregon-California: Klamath	1,857.17
Uncompahgre	3,514.53	South Dakota: Belle Fourche	5,895.02
Idaho:		Utah: Strawberry Valley	1,493.48
American Falls	39,314.58	Washington:	
Boise	61,226.44	Okanogan	1,553.60
King Hill	67.80	Yakima	2,490.22
Minidoka	93.60	Wyoming:	
Montana:		Riverton	581.55
Huntley	55.30	Shoshone	14,470.79
Milk River	12.26	Secondary projects	32,073.71
Sun River	493.35	Washington office	250.93
Montana-North Dakota: Lower Yellowstone	653.75	Denver office	21,600.12
Nebraska-Wyoming: North Platte	17,128.07	Field legal	4,821.72
Nevada: Newlands	262.76		
New Mexico: Carlsbad	72.65	Total	218,307.67

TABLE 16.—Voucher transactions, all funds, and net investments, as of June 30, 1925

State and project	Expenditures ¹		Collections ²		Net investment	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925
Arizona: Salt River		\$14,671,484.24	\$659,233.50	\$6,539,933.23	\$659,233.50	\$8,131,551.01
Arizona-California:						
Yuma	\$460,730.01	12,986,746.85	708,170.30	4,496,699.20	247,440.29	8,490,047.65
California: Orland	22,747.80	1,557,857.54	65,981.03	769,985.75	43,233.23	787,871.79
Colorado:						
Grand Valley	359,680.70	5,197,423.90	60,991.17	443,451.06	298,689.53	4,753,972.84
Uncompahgre	134,253.32	8,399,757.48	109,252.51	1,637,004.89	25,000.81	6,762,752.59
Idaho:						
American Falls	1,726,406.78	3,828,992.78	2,212,823.30	2,723,657.02	486,416.58	1,105,335.76
Boise	616,063.33	18,028,004.66	396,859.84	5,245,178.68	219,203.49	12,782,825.98
King Hill	42,329.75	2,085,565.22	14,526.45	127,823.26	27,803.30	1,957,741.96
Minidoka	194,190.46	8,987,232.30	319,571.13	5,606,707.19	125,380.67	3,380,525.11
Kansas: Garden City		390,495.54		58,002.27		332,493.27
Montana:						
Huntley	32,112.40	2,483,688.30	55,676.63	880,586.10	23,564.23	1,603,102.20
Milk River	71,741.88	7,411,311.33	29,916.83	415,191.93	41,825.05	6,996,119.40
Sun River	87,703.94	4,928,757.64	43,786.53	509,702.94	43,917.41	4,419,054.70
Montana-North Dakota: Lower Yellowstone	96,353.03	4,225,460.96	20,421.28	342,504.95	75,931.75	3,882,956.01
Nebraska-Wyoming:						
North Platte	1,675,942.05	20,034,677.87	414,376.44	4,345,681.53	1,261,565.61	15,688,996.34
Nevada: Newlands	223,202.96	9,156,054.31	168,352.53	1,929,711.85	54,850.43	7,226,342.46
New Mexico:						
Carlsbad	60,912.94	2,052,538.29	142,670.91	1,198,485.78	81,757.97	854,052.51
Hondo		406,744.36		34,841.70		371,902.66
New Mexico-Texas: Rio Grande	816,270.79	16,470,547.81	508,647.91	3,062,240.67	307,622.88	13,408,307.14
North Dakota:						
Buford-Trenton	340.00	311,189.60	251.00	17,708.93	291.00	293,480.67
Williston	83,122.61	1,393,863.16	59,419.25	517,395.87	23,703.36	876,467.29
Oregon:						
Baker	59,200.83	59,200.83	879.29	879.29	58,321.54	58,321.54
Owyhee	4,407.10	4,407.10			4,407.10	4,407.10
Umatilla	909,408.11	5,248,531.38	51,760.13	962,112.92	857,647.98	4,286,418.46
Vale	68.95	68.95			68.95	68.95
Oregon-California:						
Klamath	644,886.56	5,940,949.22	170,500.77	1,562,548.85	474,385.79	4,378,400.37
South Dakota: Belle Fourche	71,276.17	4,744,710.22	11,818.05	1,096,289.80	59,458.12	3,648,420.42
Utah:						
Salt Lake Basin	8,857.22	8,857.22			8,857.22	8,857.22
Strawberry Valley	45,011.96	4,271,808.73	163,684.07	1,452,243.58	118,672.11	2,819,565.15
Washington:						
Okanogan	76,694.86	1,959,995.60	11,376.79	499,670.10	65,318.07	1,460,325.50
Yakima	1,048,284.17	17,809,835.31	608,022.20	7,282,887.29	440,261.97	10,526,948.02

See footnotes at end of table.

TABLE 16.—*Voucher transactions, all funds, and net investments, as of June 30, 1925—Continued*

State and project	Expenditures ¹		Collections ²		Net investment	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925
Wyoming:						
Riverton.....	\$852,425.42	\$2,944,366.19	\$18,535.48	\$52,363.95	\$833,889.94	\$2,892,002.24
Shoshone.....	229,334.00	10,191,984.39	56,473.45	1,383,491.72	172,860.55	8,808,492.67
Secondary (including Deschutes) ³	43,235.79	2,177,011.54	42,421.91	655,929.97	813.88	1,521,081.57
Denver office (net not transferred to projects) ⁴	³ 14,496.63	233,094.84	12,151.42	177,590.07	³ 26,648.05	55,504.77
Field legal (net not trans- ferred to projects) ⁵	³ 3,829.12	9,661.49	1,320.95	7,394.12	³ 5,150.07	2,267.37
Washington office (net not transferred to projects) ⁶	³ 38,696.39	356,442.41	12,010.77	330,871.59	³ 50,707.16	25,570.82
Adjustment surveys, subsection K.....	41,313.39	41,313.39	-----	-----	41,313.39	41,313.39
Indian projects ⁷	-----	2,997,829.24	-----	2,997,829.24	-----	-----
Civil service retirement fund (unabsorbed) ⁸	³ 5,619.49	2,914.80	-----	-----	³ 5,619.49	2,914.80
Drainage and cut over ⁹	100,544.02	100,544.02	-----	-----	100,544.02	100,544.02
General investigations ¹⁰	291,377.37	296,497.53	603.30	26,103.30	290,774.07	270,394.23
Yuma auxiliary ¹¹	811,975.60	811,975.60	830,273.33	830,273.33	³ 18,297.73	³ 18,297.73
Total.....	11,879,384.64	205,220,394.14	7,982,760.51	60,220,973.92	3,896,624.13	144,999,420.22

¹ Expenditures from reclamation fund, increase of compensation, judgments, Court of Claims, Rio Grande Dam appropriation, Wind River Indian (Riverton), drainage and cut over, general investigations, Reclamation Service, 1923-Dec. 31, 1924, and Yuma auxiliary fund. See Table 17. Amounts given for each project include net transfers (transfers from other projects less transfers to other projects).

² Collections creditable to increase of compensation, Rio Grande Dam appropriation, Wind River (Indian), drainage and cut over, and general investigations, Reclamation Service, 1923-Dec. 31, 1924, are included in the expenditure column as contra.

³ Contra.

⁴ Transferred from secondary. Actual transactions for year; expenditures, \$5,092.15; collections, none; investment increase, \$5,092.15.

⁵ Transferred to Baker; expenditures, \$54,128.68; collections, \$879.29; net investment, \$53,249.39. Actual transactions for year; expenditures, \$97,364.47; collections, \$43,301.20; investment increase, \$54,063.27.

⁶ For analysis see Table 18.

⁷ Expended for Bureau of Indian Affairs from reclamation fund and later reimbursed by Congressional appropriation.

⁸ Analysis of civil service retirement fund:

Transferred from reclamation fund to civil service retirement fund.....	\$118,785.00
Deducted from pay of employees.....	115,870.20

Unabsorbed balance.....	2,914.80
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⁹ No transactions during fiscal year.

¹⁰ Actual transactions during fiscal year; expenditures, \$103,775.44; collections, \$603.30; investment increase, \$103,172.14.

¹¹ Actual transactions during fiscal year; expenditures, \$68,749.43; collections, \$34,756.66; investment increase, \$33,992.77.

TABLE 17.—*Voucher transactions, all funds, and net investment as of June 30, 1925, analysis by funds*

Item	Expenditures		Collections		Net investment	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925
Reclamation fund.....	\$10,642,285.45	\$199,313,880.35	\$7,152,487.18	\$59,390,700.59	\$3,489,798.27	\$139,923,179.76
Increase of compensation (net).....	38,068.69	2,797,959.67	-----	-----	38,068.69	2,797,959.67
Judgments, Court of Claims.....	44,588.62	594,936.20	-----	-----	44,588.62	594,936.20
Rio Grande Dam appropriation (net).....	-----	1,000,000.00	-----	-----	-----	1,000,000.00
Wind River Indian (Riverton) (net).....	-----	359,176.04	-----	-----	-----	359,176.04
General investigations, Reclamation Service, 1923-Dec. 31, 1924, fund (net).....	¹ 266,197.39	266,197.39	-----	-----	266,197.39	266,197.39
Yuma auxiliary project fund ²	788,429.41	788,429.41	830,273.33	830,273.33	³ 41,843.92	³ 41,843.92
Drainage and cut-over fund (net) ⁴	99,815.08	99,815.08	-----	-----	99,815.08	99,815.08
Total.....	11,879,384.64	205,220,394.14	7,982,760.51	60,220,973.92	3,896,624.13	144,999,420.22

¹ Expenditures during fiscal year, \$33,184.56.² Expenditures during fiscal year, \$45,203.24; collections, \$34,756.66.³ Contra.⁴ No transactions during fiscal year.TABLE 18.—*Analysis of voucher transactions and net investment, general offices, as of June 30, 1925*

Item	Denver		Field legal		Washington	
	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925	Fiscal year 1925	To June 30, 1925
Reclamation fund disbursements.....	\$245,160.47	\$1,756,770.10	\$51,339.45	\$587,819.81	\$156,031.75	\$5,347,332.91
Increase of compensation (net).....	¹ 1,261.00	-----	¹ 249.81	-----	¹ 1,930.87	-----
Total.....	246,421.47	1,756,770.10	51,089.64	587,819.81	154,100.88	5,347,332.91
Less:						
Net transfers.....	260,918.10	1,523,675.26	54,918.76	578,158.32	192,797.27	4,990,890.50
Collections.....	12,151.42	177,590.07	1,320.95	7,394.12	12,010.77	330,871.59
Total.....	273,069.52	1,701,265.33	56,239.71	585,552.44	204,808.04	5,321,762.09
Net investment.....	¹ 26,648.05	55,504.77	¹ 5,150.07	2,267.37	¹ 50,707.16	25,570.82

¹ Contra.

TABLE 19.—Appropriations by projects for the fiscal year 1925, increases and decreases authorized, expenditures and liabilities, and balances unencumbered

State	Project	Appropriation acts	10 per cent increases and decreases	Contributed funds	Miscellaneous collections and transfers	Total authorized	Expenditures	Balance unexpended	Liabilities	Balance unencumbered
Arizona	Salt River	\$5,000.00				\$5,000.00		\$5,000.00		\$5,000.00
Do	Yuma Auxiliary	200,000.00				200,000.00	\$8,521.62	191,478.38	\$4,818.65	186,659.73
Arizona-California	Yuma	787,000.00	\$76,500.00		\$63,764.77	997,264.77	406,469.49	520,795.28	179,165.35	341,629.93
California	Orland	96,000.00			3,625.04	99,625.04	28,470.12	71,154.92	2,872.12	68,282.80
Colorado	Grand Valley	476,000.00			62,515.30	538,515.30	321,854.41	216,660.89	55,578.83	161,082.06
Do	Uncompagre	166,000.00			20,368.38	186,368.38	133,197.94	53,170.44	5,319.63	47,850.81
Idaho	American Falls	680,000.00		\$2,523,141.42	72,159.21	3,275,300.63	1,372,669.85	1,902,630.78	443,219.17	1,459,411.61
Do	Boise	1,110,000.00	1: 119,000.00		54,344.62	1,045,344.62	546,341.58	499,003.04	101,408.49	397,594.55
Do	King Hill	44,000.00			16,134.61	60,134.61	41,249.49	18,885.12	2,417.59	16,467.53
Do	Huntley	385,000.00			123,213.05	508,213.05	154,548.58	355,664.47	23,768.37	331,896.10
Montana	Milk River	154,000.00	1 15,000.00		31,737.66	185,737.66	27,033.79	115,701.87	2,404.31	112,797.56
Do	Sun River	324,000.00	1 31,500.00		31,325.76	355,325.76	63,583.55	260,242.21	142,303.68	117,938.53
Do	Lower Yellowstone	157,000.00	1 15,000.00		30,457.60	187,457.60	81,985.43	90,472.17	5,552.10	84,920.07
Nebraska	North Platte	102,000.00	1 9,500.00		2,985.35	111,485.35	62,985.49	32,499.86	5,904.13	26,595.73
Nevada	Newlands	2,285,000.00		83,972.38	215,786.43	2,500,778.81	1,239,016.29	1,345,742.52	126,800.00	1,218,942.52
Do	Newlands	412,000.00	2 73,500.00		30,257.26	515,757.26	188,244.18	327,513.08	13,211.20	314,301.88
New Mexico	Carlsbad	57,289.00			9,528.16	66,817.16	41,775.74	25,041.42	1,832.48	23,208.94
New Mexico-Texas	Rio Grande	746,000.00	23,000.00		97,597.76	866,597.76	735,328.92	131,268.84	52,491.74	78,777.10
North Dakota	Williston	104,000.00	1 10,000.00		48,059.23	142,059.23	79,458.28	62,600.95	2,047.41	60,553.54
Oregon	Baker	496,333.04			6.48	496,341.52	2,554.55	493,786.97	357.45	493,429.52
Do	Owyhee	316,000.00			3.00	316,003.00	4,446.47	311,556.53	12.90	311,543.63
Do	Umatilla	954,000.00			24,403.11	978,403.11	728,449.93	239,953.18	69,919.29	180,033.89
Oregon-California	Klamath	709,000.00	1 69,500.00		46,364.41	685,864.41	354,882.27	330,982.14	48,345.31	282,636.83
South Dakota	Belle Fourche	192,000.00			8,794.56	200,794.56	63,752.14	137,042.42	7,512.94	129,529.48
Utah	Salt Lake Basin	376,000.00				376,000.00	7,576.46	368,423.54	1,652.89	366,770.65
Do	Strawberry Valley	45,000.00			60,817.09	105,817.09	42,251.24	63,565.85	3,165.25	60,400.60
Washington	Okanogan	74,000.00	7,000.00		3,892.81	84,892.81	70,485.25	14,407.56	8,572.97	5,834.59
Do	Yakima	1,163,000.00	72,000.00		182,699.97	853,699.97	863,742.78	563,742.78	35,692.16	528,050.02
Wyoming	Riverton	670,000.00	65,000.00		20,615.34	755,615.34	702,474.35	53,140.99	41,153.15	11,987.84
Do	Shoshone	495,000.00	1 47,500.00	900.00	78,036.21	526,436.21	240,402.81	286,033.40	49,516.82	236,516.58
	Adjustment surveys, subsection K	150,000.00				150,000.00	39,083.52	110,916.48	1,591.19	109,325.29
	Secondary	198,500.00			27,682.99	249,446.11	82,315.42	167,230.69	132,753.60	34,477.09
Total		314,129,124.04		2,635,696.79	1,336,756.29	18,101,577.12	8,725,368.35	9,376,208.77	1,571,801.77	7,804,407.00

¹ Decrease.² Includes \$48,500 emergency transfer Boise to Newlands.³ Appropriations as follows:

Act of June 5, 1924 (43 Stat., 415-419)

Act of June 5, 1924, unexpended balance, Baker

Act of Dec. 5, 1924 (43 Stat., 684 and 685)

Act of Dec. 6, 1924 (43 Stat., 708)

Act of Jan. 20, 1925 (43 Stat., 755)

Act of Mar. 4, 1925 (43 Stat., 1330-1331)

Total

\$10,856,000.00

495,935.04

2,011,500.00

14,129,124.04

ENGINEERING DATA FOR PROJECTS ON COMPLETION

[The following tables of data for projects on completion, covering reservoirs, storage dams, diversion dams, and irrigable area, are necessarily subject to some revision as the projects develop and more detailed plans are prepared. In so far as they refer to works yet to be built or areas not yet covered by canals they are not to be taken as guaranteeing that such work will ever be done. All future work depends on appropriations therefor by Congress]

Engineering data for projects when completed

RESERVOIRS

Projects	Name	Area	Capacity	Spillways			
				Length	Elevation above stream bed	Capacity	
						Normal	Maximum
		<i>Acres</i>	<i>Acre-feet</i>	<i>Feet</i>	<i>Feet</i>	<i>Sec.-ft.</i>	<i>Sec.-ft.</i>
Arizona: Salt River.....	Roosevelt.....	18,100	1,637,300	420	240	113,000	150,000
Do.....	Mormon Flat.....	1,400	90,000	243	159	-----	150,000
Do.....	Horse Mesa.....	3,500	350,000	243	300	-----	150,000
Do.....	Cave Creek flood control.....	670	14,000	1,732	59	20,000	60,000
California: Orland.....	East Park.....	1,850	51,000	415	88	8,000	12,000
Colorado: Uncompahgre	Taylor Park.....	2,260	106,000	(1)	(1)	(1)	(1)
Idaho:							
Boise.....	Deer Flat.....	9,835	177,000	None.	-----	-----	-----
Do.....	Arrowrock.....	2,860	280,000	402	247	15,000	40,000
Minidoka.....	Lake Walcott.....	11,850	² 150,000	2,385	42	40,000	60,000
Do.....	Jackson Lake.....	25,540	847,000	160	41	7,500	13,000
Do.....	American Falls.....	56,500	³¹ 1,700,000	540	50	60,000	115,000
Montana:							
Milk River.....	Sherburne Lakes.....	2,000	78,000	160	68	⁴ 200	8,000
Do.....	St. Mary Lakes.....	6,910	124,000	500	-----	20,500	20,000
Do.....	Nelson Reservoir.....	4,560	68,500	(5)	⁵ 23	-----	-----
Do.....	Point of Rocks.....	180	830	740	8	⁴ 0	700
Do.....	Chain Lakes.....	9,400	244,000	⁶ 300	58	⁴ 300	10,000
Sun River.....	Willow Creek ⁷	2,696	86,000	200	100	725	(1)
Do.....	Beaver Creek ⁸	1,360	105,000	275	190	-----	42,500
Do.....	Pishkun Reservoir ⁹	1,542	45,700	Under control.		-----	-----
Do.....	Muddy Creek.....	1,828	33,000	-----	80	284	(1)
Do.....	Benton Lake.....	9,300	144,000	Under control.		-----	-----
Nebraska-Wyoming:							
North Platte.....	Pathfinder.....	22,700	1,070,000	605	184	40,000	-----
Do.....	Lake Alice.....	900	11,400	100	18	2,500	-----
Do.....	Lake Minatare.....	2,240	60,760	100	55	2,000	-----
Do.....	Winters Creek Lake.....	360	3,000	None.	-----	-----	-----
Do.....	Guernsey.....	2,336	72,700	¹⁰ 50 ¹¹ 128	45 95	-----	50,000 30,000
Nevada: Newlands.....	Lake Tahoe.....	120,000	120,000	85	6	2,500	-----
Do.....	Lahontan.....	10,000	¹² 273,600	500	112	18,800	30,000
Do.....	Spanish Springs.....	9,400	300,000	60	96	1,600	1,600
New Mexico: Carlsbad.....	Avalon.....	970	7,000	1,026	21	86,000	120,000
Do.....	McMillan.....	6,600	45,000	1,750	26.1-24.9	34,500	60,000
New Mexico-Texas: Rio Grande.	Elephant Butte.....	40,080	2,638,000	275	193	8,000	16,000
Oregon: Umatilla.....	Cold Springs.....	1,500	50,000	330	90	6,000	6,000
Do.....	McKay.....	1,600	75,000	120	140	10,000	10,000
Oregon-California: Klamath.	Upper Klamath Lake.....	60,000	400,000	Nonc.	-----	-----	-----
Do.....	Clear Lake.....	25,000	462,000	357	24	10,000	30,000
Do.....	Gerber.....	3,800	94,000	150	63	-----	10,000

¹ Undetermined.

² 95,180 acre-feet only available; above fixed crest of spillway

³ Contract for smaller dam, with provision for increasing height if desired.

⁴ Average flow of stream on which reservoir is located.

⁵ No spillways; drainage limited; elevation is that of water surface.

⁶ Consists of 8 siphons each 5 feet high and 10 feet wide at throat.

⁷ Present capacity 16,700 acre-feet.

⁸ Tentative.

⁹ Present capacity 3,523 acre-feet.

¹⁰ One 50 by 50 foot Stoney gate; gate sill 45 feet above river bed.

¹¹ Two 64 by 14½ foot Drum gates; top elevation 95 feet above river bed.

¹² At spillway level. Proposed to increase to 290,000 by adding 2 feet by movable crests.

Engineering data for projects when completed—Continued

RESERVOIRS—Continued

Projects	Name	Area	Capacity	Spillways			
				Length	Elevation above stream bed	Capacity	
						Normal	Maximum
		<i>Acres</i>	<i>Acre-feet</i>	<i>Feet</i>	<i>Feet</i>	<i>Sec.-ft.</i>	<i>Sec.-ft.</i>
South Dakota: Belle Fourche.	Belle Fourche.....	8,010	203,000	314	100	2,000	2,000
Utah: Strawberry Valley.	Strawberry Valley.....	8,370	255,000	58	61	500	2,000
Washington:							
Okanogan.....	Salmon Lake.....	240	10,500	Siphon.	48		400
Do.....	Conconully.....	460	14,400	180	58	4,500	16,000
Yakima.....	Bumping Lake.....	1,300	34,000	235	36		6,000
Do.....	Lake Clealum.....	4,680	501,000	420	112		18,000
Do.....	Lake Kachess.....	4,540	210,000	250	53		7,200
Do.....	Tieton.....	2,500	202,500	390	206		50,000
Do.....	Lake Keechelus.....	2,550	152,000	300	60		10,000
Do.....	Clear Creek.....	270	5,830	261	58		
Wyoming:							
Riverton.....	Pilot Butte.....	882	30,000	100			500
Do.....	Bull Lake.....	3,100	145,000	170	67	4,000	8,000
Shoshone.....	Shoshone.....	6,600	456,600	300	233	11,000	30,000
Do.....	Ralston.....	200	2,100				
Do.....	Deaver.....	80	680	None.			
Total.....		525,409	14,236,400				

STORAGE DAMS

Projects	Name	Type	Maximum height	Crest length	Volume
			<i>Feet</i>	<i>Feet</i>	<i>Cubic yds.</i>
Arizona: Salt River.	Roosevelt ¹⁵	Rubble masonry arch, gravity.	280	1,125	342,325
Do.....	Mormon Flat.....	Concrete, variable radius arch.	224	444	43,500
Do.....	Horse Mesa.....	do.....	301	665	126,000
Do.....	Cave Creek flood control.	Reinforced concrete multiple arch.	107	1,732	18,774
California: Orland.	East Park ¹²	Concrete arch, gravity.	139	250	12,200
Colorado: Uncompahgre.	Taylor Park.....	Undetermined.	(14)	(14)	(14)
Idaho:					
Boise.....	Upper Deer Flat ¹³	Earth fill.....	70	4,000	1,190,275
Do.....	Lower Deer Flat ¹³	do.....	40	7,200	1,207,606
Do.....	Deer Flat Forest ¹³	do.....	16	950	22,500
Do.....	Arrowrock ¹³	Rubble concrete arch, gravity.	349	1,100	585,130
Minidoka.....	Minidoka ¹³	Rock fill, concrete core.	86	937	242,500
Do.....	Jackson Lake ¹³	Massive concrete gate section and earth fill.	67	4,450	345,400
Do.....	American Falls.....	(Concrete gravity.)	³ 87	3,100	170,000
Montana:		(Earth embankment.)	75	1,900	150,000
Milk River.....	Sherburne Lakes ¹⁵	do.....	83	1,133	201,500
Do.....	St. Mary Lakes.....	do.....	30	2,000	135,000
Do.....	Nelson ¹³	do.....	28	9,900	175,000
Do.....	Point of Rocks ¹³	do.....	12.5	2,680	31,000
Do.....	Connolly.....	do.....	68	3,125	2,019,000
Sun River.....	Willow Creek ¹⁶	Earth fill.....	110	1,045	452,000
Do.....	Beaver Creek ⁸	Masonry.....	205	820	195,000
Do.....	Pishkun ¹⁷	Earth fill.....	48	8,600	444,000
Do.....	Muddy Creek.....	do.....	90	800	440,000
Do.....	Benton Lake.....	do.....	40	240	12,000

³ Contract for smaller dam, with provision for increasing height if desired.⁸ Tentative.¹² Completed.¹³ Not designed.¹⁵ Completed except permanent spillway.¹⁶ Completed to height of 72.5 feet; crest length, 525 feet; volume, 196,400 cubic yards.¹⁷ Completed to height of 19 feet.

Engineering data for projects when completed—Continued

STORAGE DAMS—Continued

Projects	Name	Type	Maximum height	Crest length	Volume
Nebraska-Wyoming: North Platte.	Pathfinder ¹³	Broken range masonry arch	<i>Feet</i> 218	<i>Feet</i> 432	<i>Cubic yds.</i> 60,210
Do	Pathfinder Dike ¹³	Earth fill	49	1,650	152,000
Do	Upper Lake Alice ¹³	do	30	3,100	240,000
Do	Lower Lake Alice ¹³	do	23	2,550	119,000
Do	Minatare ¹³	do	65	3,700	570,000
Do	Guernsey	Earth and rock fill	97	575	332,000
Nevada: Newlands.	Lake Tahoe ¹³	Concrete sluiceway regulator	14	109	425
Do	Lohontan ¹³	Earth and gravel fill with concrete spillways.	124	1,400	770,000
Do	Spanish Springs	do	112	2,815	1,700,000
New Mexico: Carlsbad.	Avalon ¹³	Earth and rock fill, concrete core.	50	1,380	168,773
Do	McMillan ¹³	Earth and rock fill	55	2,070	150,744
New Mexico-Texas: Rio Grande.	Elephant Butte ¹³	Rubble concrete, gravity	306	¹³ 1,155	¹³ 605,200
Do	Elephant Butte Dike ¹³	Earth and rock fill	42	2,000	179,000
Oregon: Umatilla.	Cold Springs ¹³	do	98	3,800	789,500
Do	McKay	Earth and gravel fill	160	2,600	2,300,000
Oregon: California: Klamath.	Clear Lake ¹³	Rock fill	33	790	56,600
Do	Link River ¹³	Concrete	22	435	2,200
Do	Gerber ¹³	Concrete arch	85	478	11,900
South Dakota: Belle Fourche.	Belle Fourche ¹³	Earth fill	122	6,200	1,600,000
Utah: Strawberry Valley.	Indian Creek Dike ¹³	Earth fill, reinforced concrete	37	1,311	101,107
Do	Strawberry Dam ¹³	Earth fill, reinforced concrete core wall.	72	488	108,415
Washington: Okanogan	Salmon Lake ¹³	Earth embankment	40	1,230	194,288
Do	Conconully ¹³	Hydraulic earth fill	67	1,090	354,242
Yakima	Bumping Lake ¹³	Earth fill	45	3,425	247,700
Do	Lake Cle Elum ¹⁰	Earth and gravel fill	125	700	462,000
Do	Lake Kachess ¹³	do	63	1,400	193,300
Do	Tieton	Earth and rock fill, concrete-core wall.	244	905	1,850,000
Do	Lake Keechelus ¹³	Earth and gravel fill	70	6,500	639,000
Do	Clear Creek ¹³	Single concrete arch	84	404	4,100
Wyoming: Riverton.	Pilot Butte	Earth embankment	42	2,400	200,000
Do	Bull Lake	do	75	3,300	600,000
Shoshone.	Shoshone ¹³	Rubble concrete arch	328	200	78,576
Do	Ralston ¹³	Earth fill	50	2,200	24,740
Do	Deaver	do	14	1,300	30,300
Total					23,456,030

DIVERSION DAMS

			<i>Feet</i>	<i>Feet</i>	<i>Cubic yds.</i>
Arizona: Salt River.	Granite Reef ¹³	Rubble concrete weir	38	1,000	40,000
Do	Power Canal ¹³	do	123 $\frac{3}{4}$	400	4,800
Do	Joint Head ¹³	Concrete weir	10	600	1,740
Arizona - California: Yuma.	Laguna ¹³	Indian weir, concrete and rock fill. ²¹	10	4,780	441,732
California: Orland.	South Canal ¹³	Concrete on piling, with rock fill.	20	900	2,886
Do	North side ¹³	Concrete weir, with removable timber crest.	8	360	270
Do	East Park Feed Canal. ¹³	Concrete arch	44	154	1,777
Colorado: Grand Valley	Colorado River Diversion. ¹³	Masonry ogee weir with roller crest 10 to 15 feet high.	24	546	25,682
Uncompahgre	Gunnison ¹³	Crib with rock fill and movable flashboards.	15 $\frac{3}{4}$	237	3,200
Do	Montrose and Delta ¹³	Timber weir with concrete apron sluiceway and cut-off wall.	6.8	68 $\frac{1}{2}$	172

¹³ Completed.¹⁸ Including spillway and approaches, 1,675 feet.²⁰ Including spillway, 619,000 cubic yards.²⁰ Present development, rock-fill timber crib; height, 11 ft.; volume, 1,500 cubic yards.²¹ Maximum height 40 feet from bottom of sheet piling to top of dam; water raised 10 feet.

Engineering data for projects when completed—Continued

DIVERSION DAMS—Continued

Projects	Name	Type	Maximum height	Crest length	Volume
Colorado—Contd.			<i>Feet</i>	<i>Feet</i>	<i>Cubic yds.</i>
Uncompahgre.....	Loutsenhizer ¹³	Pile and timber weir.....	8	100	-----
Do.....	Selig ¹³	Pile and timber weir with concrete sump.....	6	95½	205
Do.....	Ironstone ¹³	Pile foundation with timber deck and needle flashboards.....	8½	58½	-----
Do.....	East ¹³	Pile and timber weirs, movable flashboards.....	(²²)	144	-----
Do.....	Garnet ¹³	Rock baskets, faced and surfaced with concrete.....	6½	75	500
Idaho:					
Boise.....	Boise River ¹³	Rubble concrete weir.....	45	²³ 246	21,750
Do.....	Black Canyon ¹³	Concrete masonry.....	183	1,040	79,844
Minidoka.....	Minidoka ¹³	Combined diversion and storage dam. (See Storage.)			-----
Montana:					
Milk River.....	Swift Current ¹³	Earth and timber crib.....	13	2,800	86,700
Do.....	St. Mary ¹³	Concrete.....	6.5	198	480
Do.....	Chinook ²⁴				
Do.....	Dodson ¹³	Timber crib rock filled, concrete abutments, movable crest.....	25	319	12,000
Do.....	Vandalia ¹³	Reinforced concrete, automatic movable crest.....	34	1,500	11,000
Sun River.....	Sun River ¹³	Concrete masonry.....	132	212	6,200
Montana-North Dakota: Lower Yellowstone.	Lower Yellowstone ¹³	Rock-filled, timber weir.....	12	700	14,500
Nebraska-Wyoming: North Platte.	Whalen ¹³	Concrete weir.....	29	300	80,740
Do.....	Horse Creek ¹³	do.....	12	100	220
Nevada: Newlands..	Truckee River ¹³	16 concrete sluiceways.....	22	171	3,322
Do.....	Carson River ¹³	23 concrete sluiceways.....	20	240	2,707
Do.....	Spanish Springs.....	Concrete overflow.....	22	250	2,140
New Mexico: Carlisbad.	Avalon ¹³	Combined storage and diversion. (See Storage.)			-----
New Mexico-Texas: Rio Grande.	Leasburg ¹³	Rubble concrete weir.....	10.8	600	2,413
Do.....	Mesilla ¹³	do.....	16.7	303	2,876
Do.....	Mexican ²⁵	Rubble masonry.....	4.7	320	1,200
Do.....	Percha ¹³	Rubble concrete.....	17	350	4,346
Oregon: Umatilla..	Feed Canal (Echo) ¹³	Concrete weir on timber crib.....	2½	400	296
Do.....	Maxwell Canal ¹³	do.....	2.3	175	43
Do.....	Three-Mile Falls ¹³	Concrete multiple arch.....	24	800	4,160
Oregon - California: Klamath.	Lost River ¹³	Hollow reinforced concrete.....	40	290	5,550
Do.....	Lower Lost River ¹³	Reinforced concrete.....	15	204	625
Do.....	Malone ¹³	Earth, with concrete spillway.....	30	515	18,500
Do.....	Miller ¹³	do.....	12	290	1,000
South Dakota: Belle Fourche.	Diversion ¹³	Concrete weir.....	23	400	12,149
Utah: Strawberry Valley.	Spanish Fork ¹³	do.....	17	70	1,262
Do.....	Indian Creek Crossing. ¹³	Earth.....	17	1,300	15,183
Washington:					
Okanogan.....	Salmon Creek ¹³	Concrete weir.....	4½	50	132
Yakima.....	Sunnyside ¹³	Concrete ogee weir.....	8½	500	2,291
Do.....	Tieton Diversion ¹³	Concrete and rock-filled crib.....	3	110	334
Wyoming:					
Riverton.....	Wind River ¹³	Concrete weir with earth embankment.....	37	2,285	123,850
Shoshone.....	Corbett ¹³	Reinforced concrete weir.....	18	400	4,951
Do.....	Willwood ¹³	Concrete gravity, with ogee weir section.....	69.5	320	22,119
Total.....					1,067,847

¹³ Completed.²² Two weirs, one 6 feet by 72 feet, the other 6 feet 10 inches by 72 feet.²³ Length, including logway.²⁴ Will be constructed by irrigation districts. No data available as to type and dimensions.²⁵ Constructed by Mexican authorities and used jointly.

Engineering data for projects when completed—Continued

IRRIGABLE AREA, PRESENT STATUS

[Subject to revision after classification of land]

State, project, and division	Public land			State land unsold	Indian land	Private land		Total
	Entered	Open	Withdrawn			Rail-road, unsold	Other	
Arizona:	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Salt River.....	19,867						216,133	236,000
Gravity system.....	13,412						216,133	229,545
Pumping system.....	6,455							6,455
Arizona-California: Yuma	16,714	1,632	33,284		8,200		50,170	110,000
Arizona—								
Valley.....	6,070		1,000				42,930	50,000
Mesa.....	4,444	1,632	31,884				7,040	45,000
California—Reservation.....	6,200		400		8,200		200	15,000
California: Orland-Main.....							³⁶ 20,659	³⁶ 20,659
Colorado:								
Grand Valley.....	12,047	403	11,110				26,440	50,000
Garfield gravity.....	9,517	403	7,080				13,000	30,000
Garfield pumping.....	2,530		4,030				3,440	10,000
Orchard Mesa pumping.....							10,000	10,000
Uncompahgre.....	18,588	1,832	674				74,108	95,202
South.....	2,270	359	37				6,195	8,861
West.....	2,167		12				3,942	6,121
Montrose & Delta.....	5,096	80	31				22,732	27,939
Loutsenhizer.....	218	37					6,317	6,572
Selig.....	4,010	755	480				7,265	12,510
Ironstone.....	1,140	176	20				16,373	17,709
East.....	3,679	425	94				8,669	12,867
Garnet.....	8						2,615	2,623
Idaho:								
Boise.....	67,621		5,560	5,980			274,950	354,111
Arrowrock (Idaho).....	66,382			60			203,759	270,201
Arrowrock (Oregon).....	1,239						5,697	6,936
Notus.....							6,874	6,874
Hillcrest.....			2,230				11,870	14,100
Black Canyon.....			3,330	5,920			46,750	56,000
King Hill.....				335			16,553	16,888
Minidoka.....	96,128	591	106,840	8,999			23,940	236,498
Pumping.....	30,258			788			17,838	48,884
Gravity.....	65,870	591		371			5,782	72,614
North side pumping extension.....			106,840	7,840			320	115,000
Montana:								
Huntley.....	26,172		2,624		393		3,349	32,538
Gravity.....	21,312		1,944		393		3,349	26,998
Pumping.....	4,860		680					5,540
Divisions—								
Pryor.....	23,527		1,902		215		2,757	28,401
Eastern.....	925		42		178		592	1,737
Fly Creek.....	1,720		680					2,400
Milk River.....	29,732		15,611	5,542			94,305	145,190
Chinook division.....	1,941		1,608	1,198			50,754	55,501
Malta division.....	21,833		13,583	3,181			29,113	67,710
Glasgow division.....	5,958		420	1,163			14,438	21,979
Sun River.....	39,909	429	38,026	6,881			28,596	113,841
Sun River Slope.....	700		12,900	1,100			2,300	17,000
Big Coulee.....				356			1,962	2,318
Greenfields.....	24,734		21,915	4,771			20,701	72,121
Mill Coulee.....	3,000		3,000	500			2,000	8,500
Fort Shaw.....	11,475	429	211	154			1,633	13,902
Montana-North Dakota:								
Lower Yellowstone.....	13,676		2,067	986		95	42,525	59,349
Montana.....	7,029		1,060	846		95	29,998	39,028
North Dakota.....	6,647		1,007	140			12,527	20,321
Divisions—								
Gravity.....	13,416		2,011	704		50	40,860	57,041
Pumping.....	260		56	282		45	1,655	2,308
Nebraska-Wyoming:								
North Platte.....	136,677		12,355	2,045			87,793	238,870
Interstate division.....	83,697		1,143	529			29,264	114,633
Nebraska.....	81,086		1,143	529			28,985	111,743
Wyoming.....	2,611						279	2,890
Fort Laramie division.....	45,491		10,871	1,477			50,048	107,887
Nebraska.....	10,425		5,530	246			39,029	55,230
Wyoming.....	35,066		5,341	1,231			11,019	52,657
Northport division, Nebraska.....	7,489		341	39			8,481	16,350

³⁶ Includes 320 acres of vested rights and 171 acres of town and school sites.

Engineering data for projects when completed—Continued

IRRIGABLE AREA, PRESENT STATUS—Continued

State, project, and division	Public land			State land unsold	Indian land	Private land		Total
	Entered	Open	Withdrawn			Railroad, unsold	Other	
Nevada:	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Newlands.....	31,223	4,455	26,445	-----	23,877	20,000	53,000	159,000
Carson division.....	27,203	4,455	4,825	-----	4,877	2,500	39,140	83,000
Truckee division.....	4,020	-----	2,120	-----	-----	2,000	13,860	22,000
Pyramid division.....	-----	-----	4,500	-----	²⁷ 19,000	1,500	-----	25,000
Lovelock division.....	-----	-----	15,000	-----	-----	14,000	-----	29,000
New Mexico: Carlsbad.....	55	-----	-----	-----	-----	-----	24,984	25,039
New Mexico-Texas:								
Rio Grande.....	1,500	100	700	1,000	-----	-----	151,700	155,000
New Mexico.....	1,500	100	700	1,000	-----	-----	87,700	91,000
Texas.....	-----	-----	-----	-----	-----	-----	64,000	64,000
Divisions—								
Rincon.....	-----	20	-----	700	-----	-----	15,900	17,000
Leasburg.....	600	40	640	200	-----	-----	29,950	31,000
Mesilla.....	900	40	60	100	-----	-----	45,850	47,000
El Paso.....	-----	-----	-----	-----	-----	-----	55,000	55,000
Unallocated.....	-----	-----	-----	-----	-----	-----	5,000	5,000
North Dakota: Williston.....	254	139	-----	23	-----	-----	10,337	10,753
Oregon:								
Umatilla.....	5,413	-----	2,376	-----	-----	3,319	17,192	28,300
East division.....	3,030	-----	-----	-----	-----	1,407	12,563	17,000
West division.....	2,383	-----	2,376	-----	-----	1,912	4,629	11,300
Oregon-California: Klamath.....	5,760	-----	20,953	-----	-----	-----	140,714	167,427
Oregon.....	2,917	-----	1,327	-----	-----	-----	103,166	107,410
California.....	2,843	-----	19,626	-----	-----	-----	37,548	60,017
Divisions—								
Main.....	2,752	-----	-----	-----	-----	-----	39,198	41,950
Tule Lake.....	3,008	-----	20,953	-----	-----	-----	239	24,200
Pumping.....	-----	-----	-----	-----	-----	-----	20,595	20,595
Langell Valley.....	-----	-----	-----	-----	-----	-----	20,782	20,782
Bonanza Springs.....	-----	-----	-----	-----	-----	-----	5,900	5,900
Lower Klamath Lake.....	-----	-----	-----	-----	-----	-----	²⁸ 54,000	54,000
South Dakota: Belle Fourche.....	37,695	37	4,508	1,196	-----	-----	45,329	88,765
Utah: Strawberry Valley.....	1,953	-----	-----	-----	-----	-----	²⁹ 51,936	²⁹ 53,889
High Line.....	1,953	-----	-----	-----	-----	-----	²⁹ 19,417	²⁹ 21,370
Spanish Fork.....	-----	-----	-----	-----	-----	-----	22,519	22,519
Springville-Mapleton.....	-----	-----	-----	-----	-----	-----	10,000	10,000
Washington:								
Okanogan.....	116	-----	-----	-----	-----	-----	7,384	7,500
Gravity.....	-----	-----	-----	-----	-----	-----	-----	6,325
Pumping.....	-----	-----	-----	-----	-----	-----	-----	1,175
Yakima.....	7,358	-----	13,688	5,939	241	21,729	291,032	339,987
Sunnyside.....	2,627	-----	-----	30	241	-----	104,702	107,600
Tieton.....	2,048	-----	-----	4	-----	-----	29,948	32,000
Roza.....	120	-----	1,523	2,067	-----	11,310	43,330	58,350
Moxee.....	1,663	-----	775	1,332	-----	2,783	30,197	36,750
Kittitas.....	-----	-----	4,990	1,406	-----	3,936	59,955	70,287
Kennewick.....	900	-----	6,400	1,100	-----	3,700	22,900	35,000
Wyoming:								
Riverton.....	-----	-----	69,000	-----	1,000	-----	30,000	100,000
Shoshone.....	62,517	2,293	125,692	18,451	-----	687	8,760	218,400
Montana, Frannie division.....	87	-----	-----	4	-----	-----	-----	91
Wyoming—								
Garland division.....	40,065	891	711	352	-----	-----	1,981	44,000
Frannie division.....	22,365	1,402	2,969	995	-----	687	1,491	29,909
Willwood division.....	-----	-----	14,312	500	-----	-----	788	15,600
Heart Mountain division.....	-----	-----	33,100	3,200	-----	-----	2,500	38,800
Oregon Basin division.....	-----	-----	74,600	13,400	-----	-----	2,000	90,000
Total primary projects.....	630,975	11,911	491,513	57,377	33,711	45,830	1,791,889	3,063,206

²⁷ 3,000 acres to be allotted to about 600 Indians; remainder of land to be sold in accordance with act (33 Stat., 225).

²⁸ Includes some public land, but distribution not known.

²⁹ The 1,500 acres of irrigable area formerly included in the proposed Sanatquin pumping district under the High Line division, have been eliminated from this report.

SUMMARY OF CONSTRUCTION RESULTS, JUNE 30, 1925

Items	To June 30, 1925		To June 30, 1924		Increase	
Reservoir capacity available (original).....	<i>Acre-feet</i> 10, 325, 053		<i>Acre-feet</i> 10, 018, 993		<i>Acre-feet</i> 306, 060	
CANALS, DITCHES, AND DRAINS						
Canals over 800 second-feet capacity.....	<i>Miles</i> 517. 5		<i>Miles</i> 511. 5		<i>Miles</i> 6	
Canals 301 to 800 second-feet capacity.....	712. 61		712. 61		-----	
Canals 50 to 300 second-feet capacity.....	2, 305. 26		2, 270. 52		34. 74	
Canals less than 50 second-feet capacity.....	9, 310. 91		9, 086. 71		224. 20	
Total canals.....	12, 846. 28		12, 581. 34		264. 94	
Waste-water ditches.....	1, 029. 62		982. 40		47. 22	
Drains, open.....	1, 690. 45		1, 498. 75		191. 70	
Drains, closed.....	213. 20		212. 33		. 87	
Total.....	2, 933. 27		2, 693. 48		239. 79	
Grand total.....	15, 779. 55		15, 274. 82		504. 73	
TUNNELS						
Number.....	106		105		1	
Length.....	152, 345		146, 614		5, 731	
STORAGE AND DIVERSION DAMS						
Masonry.....	<i>Cubic yards</i> 2, 274, 659		<i>Cubic yards</i> 2, 238, 901		<i>Cubic yards</i> 35, 758	
Earth.....	14, 341, 608		12, 798, 419		1, 543, 189	
Rockfill and crib.....	1, 725, 775		1, 679, 865		45, 910	
Total.....	18, 342, 042		16, 717, 185		1, 624, 857	
DIKES AND LEVEES						
Length and volume.....	<i>Feet</i> 1, 069, 079	<i>Cubic yards</i> 5, 554, 163	<i>Feet</i> 1, 010, 372	<i>Cubic yards</i> 5, 204, 264	<i>Feet</i> 58, 707	<i>Cubic yards</i> 349, 899
	Concrete	Wood	Concrete	Wood	Concrete	Wood
CANAL STRUCTURES						
Costing over \$2,000.....	<i>Number</i> 1, 461	<i>Number</i> 233	<i>Number</i> 1, 385	<i>Number</i> 229	<i>Number</i> 76	<i>Number</i> 4
Costing \$500 to \$2000.....	3, 188	1, 019	3, 030	909	158	110
Costing \$100 to \$500.....	17, 286	10, 619	16, 275	10, 010	1, 011	609
Costing less than \$100.....	31, 325	76, 032	29, 096	74, 127	2, 229	1, 905
Total.....	53, 260	87, 903	49, 786	85, 275	3, 474	2, 628
Grand total.....	141, 163		135, 061		6, 102	
	Number	Length	Number	Length	Number	Length
BRIDGES						
Steel.....	112	<i>Feet</i> 9, 124	112	9, 124	-----	-----
Combination.....	422	12, 776	422	12, 776	-----	-----
Wood.....	9, 781	226, 541	9, 298	216, 083	483	10, 458
Concrete.....	363	4, 959	361	4, 934	2	25
Total.....	10, 678	253, 400	10, 193	242, 917	485	10, 483
CULVERTS						
Concrete.....	3, 329	166, 019	3, 198	154, 512	131	11, 507
Metal.....	2, 410	85, 257	2, 280	80, 476	130	4, 781
Terra-cotta.....	2, 079	82, 526	2, 006	80, 127	73	2, 399
Wood.....	4, 263	109, 509	4, 228	108, 603	35	906
Total.....	12, 081	443, 311	11, 712	423, 718	369	19, 593

Summary of construction results, June 30, 1925—Continued

Items	To June 30, 1925		To June 30, 1924		Increase	
PIPE	Linear feet		Linear feet		Linear feet	
Concrete.....	986, 431		915, 295		71, 136	
Metal.....	345, 553		319, 608		25, 945	
Terra-cotta (tile).....	1, 682, 756		1, 612, 296		70, 460	
Wood.....	674, 076		660, 596		13, 480	
Total	3, 688, 816		3, 507, 795		181, 021	
FLUMES	Number	Length (feet)	Number	Length (feet)	Number	Length (feet)
Concrete.....	101	72, 250	100	71, 940	1	310
Metal.....	1, 667	212, 982	1, 509	212, 717	158	265
Wood.....	2, 623	502, 558	2, 546	494, 773	77	7, 785
Total	4, 391	787, 790	4, 155	779, 430	236	8, 360
CANALS LINED	Concrete	Wood	Concrete	Wood	Concrete	Wood
Length (miles).....	429. 57	484. 57	412. 02	4. 12	17. 55	480. 45
Total	914. 14		416. 14		498	
BUILDINGS	Number		Number		Number	
Offices	101		101		-----	
Residences.....	730		730		-----	
Power plants.....	33		33		-----	
Pumping stations.....	178		178		-----	
Barns, storehouses, etc.....	575		575		-----	
Total	1, 617		1, 617		-----	
WELLS	Number	Depth	Number	Depth	Number	Depth
Number and depth.....	640	66, 195	629	61, 475	11	4, 720
COMMUNICATIONS	Miles		Miles		Miles	
Roads	1, 049. 78		1, 044		5. 78	
Railroads	83. 00		83		-----	
Telephone lines.....	3, 349. 00		3, 349		-----	
Transmission lines.....	1, 652. 43		1, 395		257. 43	
Total	6, 134. 21		5, 871		263. 21	
POWER DEVELOPED						
Water and steam, horsepower.....	75, 079		64, 159		10, 920	
EXCAVATION	Cubic yards		Cubic yards		Cubic yards	
Class 1, earth.....	222, 680, 628		212, 634, 034		10, 046, 594	
Class 2, indurated material.....	12, 721, 287		12, 340, 294		380, 993	
Class 3, rock.....	10, 412, 666		9, 965, 851		446, 815	
Total	245, 814, 581		234, 940, 179		10, 874, 402	
Riprap (cubic yards).....	2, 407, 545		2, 378, 337		29, 208	
Paving (square yards).....	987, 585		962, 682		24, 903	
Concrete (cubic yards).....	353, 721		3, 450, 251		83, 470	
Cement (barrels).....	3, 670, 211		3, 408, 191		262, 020	

POWER AND PUMPING

Power plants operated on Bureau of Reclamation projects during the fiscal year 1924-25

Project	Name of plant	Outgoing line voltage	Station capacity	Number of units	Head	First cost of plant	Cost of operation and maintenance	Estimated depreciation	Cost per kilowatt-hour exclusive of depreciation	Distribution of kilowatt-hours generated				Total output	Gross power sales
										Sold to consumers	Used for irrigation purposes	Used for other purposes	Losses		
					<i>Feet</i>									<i>Kilowatt-hours</i> (^c)	
Boise	Black Canyon ¹	66,000	Kv-a	2	80-88	2 \$395,000.00								4 3,522,800	
Minidoka	Boise River ³	22,000	1,875	3	30	167,905.37	\$9,645.63	\$5,540.00	\$0.0027					4 43,704,400	
	Minidoka	33,000 and 2,300	7,000	5	44-49	455,317.40	20,701.29	13,012.00	.000473	19,193,800	23,953,700	5,174,500	2,530,700	2 94,524	\$107,942.68
Newlands	American Falls	33,000 and 2,300	1,540	3	36 and 45	76,975.00	5,300.72	10,200.00	.00254					4 2,088,100	
	Lahontan ⁴	33,000	1,875	3	110	141,866.01	12,898.04	5,000.00	.0031	3,932,640	129,489	42,351		4 104,480	14,154.85
Williston	Williston (steam-electric) ⁵	22,000 and 2,200	1,150	4		175,000.00	772,500.00	3,000.00	.0381	1,136,820	2 297,918	2 366,902	2 94,524	2 1,896,164	2 46,568.00
North Platte	Lingle ⁶	33,000 and 2,300	750	2	105	99,834.32	42,101.57	10,200.00	.0193	1,229,005		438,820	516,130	2,183,955	35,252.98
Okanogan	Power Plant No. 1 ⁷	6,600	187	1	108	11,923.44									
Rio Grande	Power No. 2 ⁷	6,600	187	1	55	13,931.42									
	Elephant Butte No. 2	2,300	187	1	147	8,440.50	1,930.00	253.00	.0064	786		29,594		30,380	68.88
Riverton	Pilot Butte ⁸	33,000	1,000	1	90-110	146,496.34	3,348.78	4,187.00	.0046	172,139		405,702	92,457	730,358	3,807.53

¹ Under construction.² Estimated.³ Under contract of Apr. 1, 1923, the output is delivered to Idaho Power Co. on exchange basis.⁴ These 4 plants operated as a system by the Minidoka project.⁵ Lahontan plan under 10-year lease to Canyon Power Co., expires in 1934.⁶ Two units from Tieton Power Plant No. 2 being installed.⁷ Output, cost, and distribution include 962,800 kilowatt-hours purchased from Western Public Service Co. for \$31,492.66.⁸ Not operated fiscal year 1924-25.⁹ Plant began operations Jan. 8, 1925.

Power plants operated on Bureau of Reclamation projects during the fiscal year 1924-25—Continued

Project	Name of plant	Outgoing line voltage	Station capacity	Number of units	Head	First cost of plant	Cost of operation and maintenance	Estimated depreciation	Cost per kilowatt-hour exclusive of depreciation	Distribution of kilowatt-hours generated				Total output	Gross power sales
										Sold to consumers	Used for irrigation purposes	Used for other purposes	Losses		
Salt River	Arizona Falls	11,000	Kv-a	2	Feet	\$109,500.73	\$10,032.72	\$5,475.04	\$0.00333					Kilowatt-hours	
	Chandler	11,000	1,060	1	19	91,990.84	10,084.05	4,599.54	.00398					3,025,850	
	Cross-Cut	45,000 and 11,000	5,250	6	111	755,147.29	28,711.69	37,757.36	.00294					2,538,980	
	Roosevelt	45,000 and 2,300	19,250 and 2,000	7	80-225	1,235,894.58	115,283.31	61,795.13	.00223	54,754,758	18,216,492	8,031,134	9,837,514	9,764,500	\$705,171.23
Shoshone	South Consolidated	33,000	2,000	2	34	163,139.60	12,587.85	8,156.98	.001775					51,689,350	
	Shoshone	2,300	2,000	2	220	565,454.00	10,442.31	22,440.00	.00813	251,003		727,171	306,916	7,093,600	
Strawberry Valley.	Spanish Fork	11,000	1,000	2	123.5	60,724.80	17,754.56	3,033.72	.0119	1,350,216		165,799	74,335	1,285,090	9,462.00
	Tieton No. 1	2,300	270	2	45	40,000.00								1,490,350	25,823.45
Yakima Storage.	Tieton No. 2	2,300	1,000	2	74	78,895.63	10,518.46	1,505.00	.00413						
	Rocky Ford	6,600	187	1	73	23,000.00	2,500.60	1,056.00	.0037					2,546,130	
Yakima Sunny-side.														674,600	

⁹ Dismantled during the year.¹⁰ Includes transmission lines and transformers to the value of \$9,000.

Pumping plants operated on Bureau of Reclamation projects during fiscal year 1924-25

Project	Name of plant	Type of units ¹	Plant capacity		Num- ber of units	Net lift	First cost of plant	Cost of operation and main- tenance	Energy used for pumping <i>Kilowatt- hour</i>	Acre-feet pumped	Cost per acre-foot without depre- ciation	
			Horse- power	Second- feet							Per acre- foot	Per foot lift
Boise Grand Valley Huntley	Black Canyon ²	V. T. D. S.	1,244	266	2	285	\$109,213.15	\$4,705.67		82,447	\$0.057	\$0.0029
	Price Sub.	V. T. D. C.	125	25.3	1	31	46,697.33	5,505.00		5,560	.091	.00293
	Ballantine	do	620	56.0	2	45	73,833.32	1,557.56		11,690	.133	.00296
	Ballantine auxiliary	O. F. D. C.										
	Dry Lake ³	V. T. D. C.	75	19.3	1	51	31,173.04					
Klamath	Tule Lake No. 1	V. T. D. S.	120	62.8	2	56						
	Tule Lake No. 2	do	25	14.2	1	56						
	Thomas Point	H. T. D. C.	220	40.0	2	31	24,690.00	300.00		18,000	.166	.0277
							49,970.43	\$193.45		\$3,350	.0578	.00186
										{ 193,200 157,100 96,600 }	.08	.00267
Lower Yel- lowstone. Mimidoka	Pumping station No. 1	V. M. D. C.	3,680	803.0	5	29.2	186,020.06					
	Pumping station No. 2	do	2,560	711.0	4	30.2	184,920.00					
	Pumping station No. 3	do	1,980	433.0	3	29.9	103,106.96					
	Boersch Lake ⁴	do	200	50.0	2	19.8	32,947.72					
	West End ⁵	H. M. D. C.	150	40.0	2	21.25	18,745.61					
Williston	A-4 pumping station ⁶	Scoop wheel	25	20.0	1	3.5	3,328.42					
	1817 pumping station ⁷	do	10	11.0	1	4.8	3,634.71					
	C-2 pumping station ⁸	do			1	2.5				(⁹)		
	114 pumping station ⁷	H. M. D. C.	7.5	4.0	1	7.0	2,803.97					
	1812 pumping station ⁷	do	5.0	2.0	1	4.0	1,008.76					
Williston	Pumping station No. 1	S. T. D. C.	490	44.9	3	56 and 21	8,851.00	3,035.69		569	5.33	.095
	Pumping station No. 2	H. M. D. C.	175	33.0	2	26.6	13,003.00	4,851.13		825	5.88	.221
	Pumping station No. 3	do	270	60.0	3	32.0	9,303.99	1,000.00		1,759	5.28	.165
	Pumping station No. 4	do	100	20.0	1	27.25	8,821.00	2,828.44		453	6.24	.23

¹ Type V. M. D. C. = vertical motor-driven centrifugal pump; H. M. D. C. = horizontal motor-driven centrifugal pump; S. T. D. C. = steam turbine-driven centrifugal pump; G. F. D. C. = gas engine driven centrifugal pump; V. T. D. C. = vertical hydraulic turbine-driven centrifugal pump; H. T. D. C. = horizontal hydraulic turbine-driven centrifugal pump; O. E. D. S. = oil engine driven screw pump; C. E. D. S. = gas engine driven centrifugal pump; V. T. D. S. = vertical hydraulic turbine-driven screw pump; H. M. D. S. = horizontal motor-driven screw pump.

² Completed in 1924. Plant cost is field cost only.

³ Operated only for testing purposes.

⁴ Plant put in operation Mar. 1, 1925.

⁵ Estimated.

⁶ High cost due to pump alterations to increase capacity.

⁷ Operated by local irrigation district.

⁸ Not available.

⁹ No record.

Project	Name of plant	Type of units	Plant capacity		Num-ber of units	Net lift	First cost of plant	Cost of operation and maintenance	Estimated depreciation	Energy used for pumping	Acre-foot pumped	Cost per acre-foot without depreciation	
			Horse-power.	Second-foot								Per acre-foot	Per foot lift
Newlands	Lake Tahoe (temporary) ¹⁰	G. E. D. C.	175	---	1	Feet 1.5	\$22,389.61	\$4,089.81	---	---	11,600	\$0.353	\$0.235
	Lahontan (temporary)	H. M. D. C.	400	40-60	2	35-65	36,289.62	8,436.61	---	---	4,603	1.83	.39
	Dutch Flat Drain No. 1	V. M. D. C.	30	---	1	52	---	---	---	---	---	---	---
	Dutch Flat Drain No. 2	do	30	---	1	30	23,393.94	4,860.08	\$3,000.00	---	751	6.47	.156
	Dutch Flat Drain No. 3	do	40	---	1	47	---	---	---	---	---	---	---
Okanogan	Duck Lake (new) ¹¹	H. M. D. C.	50	5.0	1	60	17,201.92	3,664.94	---	206,566	1,868	1.96	.0327
	Government Well No. 1 and 2, ¹¹	V. M. D. C.	30	2.0	2	51	18,588.21	921.62	---	49,946	219	4.21	.0825
	Robinson Flat ¹¹	H. M. D. C.	400	12.0	2	188	30,077.24	10,592.78	---	562,500	1,449	7.31	.039
Salt River	Salmon Lake ¹¹	G. E. D. C.	275	---	2	23-35	17,842.16	21,144.48	---	12 49,954	2,223	9.51	.33
	Dobbins Pumping Plant	V. M. D. C.	75	---	1	50	13,301.05	552.58	21.07	270,608	3,448	1.603	.00160
	Chandler division ¹⁴	{ 2 M. D. S. 10 V. M. D. C. 1 H. M. D. C. H. M. D. C.	1,020	---	13	36	148,084.21	20,342.11	10,365.89	4,053,275	53,604	37.65	.0105
Yakima Sun-ny-side.	High Line ¹⁴	H. M. D. C.	900	60.0	4	47	91,038.90	19,534.54	4,551.94	3,263,517	31,871	61.29	.0130
	Tempe Pumping Plant ¹⁴	do	150	---	1	45	5,799.84	6,062.32	401.00	9,877,426	9,388	9.459	.01435
	Mesa division ¹⁴	V. M. D. C. and S.	690	---	16	22.08	145,047.84	12,274.28	10,153.85	2,157,521	33,240	3.8483	.01577
	Laveen division ¹⁴	V. M. D. C.	60	---	3	---	18,328.45	3,048.93	1,282.99	235,428	3,301	9.236	---
	Phoenix division ¹⁴	V. M. D. C. and S.	745	---	29	52	172,921.77	19,347.52	12,104.52	3,094,407	54,589	3.5649	.00683
	Tempe division ¹⁴	V. M. D. C.	1,055	---	15	38	109,889.82	19,847.08	7,692.29	4,181,014	5,366.7	3.719	.00979
	Salt River division ¹⁴	do	830	---	23	31	175,240.44	20,052.97	12,266.83	3,752,097	53,724	3.825	.01234
	San Francisco ¹⁴	H. M. D. C.	100	---	1	38	29,978.89	1,091.84	2,663.89	263,484	2,526	4.322	.0137
	Tolleson division ¹⁴	V. M. D. C. and S.	650	---	20	37	168,360.75	16,919.33	11,785.25	2,909,324	40,255	4.206	.01137
	Maricoba Garden	V. M. D. C.	75	---	1	25	12,382.42	1,385.07	8,667.69	30,774	375	3.690	.1476
	Grandview ⁷	{ 1-V. T. D. C. 2-H. M. D. C.	365	36%	3	35-78	72,500.00	5,090.00	3,120.00	---	12,455	.409	.00615
	Hillcrest ⁷	V. T. D. C.	35	1.56	1	103	5,800.00	150.00	300.00	---	345	.435	.00422
	Little Snipes Mountain ⁷	H. T. D. C.	5	1%	1	50	1,162.00	35.00	45.00	---	80	.437	.00874
	Outlook ⁷	V. T. D. C.	800	50.3	2	110	92,000.00	3,433.28	2,480.00	---	15,079	.228	.00207
	Prosser ⁷	H. T. D. C.	190	12	1	105	31,968.00	1,518.85	1,500.00	---	3,350	.453	.00431
	Spring Creek ⁷	do	160	11.6	1	90	28,036.00	1,518.85	1,500.00	---	3,527	.431	.00478
Yuma	Snipes Mountain ⁷	V. T. D. C.	500	14.36	2	200	48,500.00	2,308.75	1,890.00	---	6,514	.354	.00177
	"B" Lift.	{ 1-V. M. D. C. 2-H. M. D. C.	1,100	105	3	70	159,524.11	\$27,212.29	600.00	\$ 917,862	\$ 5,973	4.55	.065

	G. E. D. C.	110	50	2	0-6	6, 775. 60	(1 ¹)	2, 500. 00	\$ 504, 212	\$ 49, 097	. 436	. 0413
Reservation.....	{1-O. E. D. S.	525	133-207	3	8-14	191, 066. 91	\$ 21, 423. 64	2, 500. 00	\$ 504, 212	\$ 49, 097	. 436	. 0413
Valley drainage.....	{2-H. M. D. S.	35	-----	1	7	900. 00	\$ 446. 34	50. 00	-----	\$ 75	5. 95	. 85
West Yuma pumping.....	G. E. D. C.											

⁵ Estimated.

⁷ Operated by local irrigation district.

¹⁰ Operated 2 months at Lake Tahoe and 3½ months at Lahontan.

¹¹ Power purchased from Washington Power Co. An additional 125-horsepower motor and pump operated during portion of 1924.

¹² Gallons of distillate.

¹³ Partial first cost.

¹⁴ Operated by Salt River Valley Water Users Association.

¹⁵ Not operated.

Principal contracts for sale of power in force June 30, 1925

Project	Contractor	Date of contract	Date of expiration	Maximum load	Gross rate per kilowatt-hour	Minimum monthly payment	Gross income fiscal year 1924-25	Remarks
Boise	Idaho Power Co.	Apr. 1, 1923	Mar. 31, 1926	Kilowatts 1, 875	Cents	None	\$11,000.00	Available load divided between contractor and Minidoka project.
Minidoka	Amalgamated Sugar Co.	May 1, 1922	Feb. 28, 1926	57	4 to 1½	\$2 gross per kilowatt	42,245.86	
	City of Burley	Jan. 15, 1920	Jan. 1, 1930	2,438	4 to 1½	do.	24,047.57	
	City of Rupert	do.	do.	1,890	4 to 1½	do.	1,029.78	
	East End Electric Co.	Jan. 23, 1918	Jan. 23, 1928	20	4 to 1½	do.	1,077.81	
	Perry Light & Power Co.	Mar. 12, 1919	Mar. 12, 1929	20	4 to 1½	do.	2,894.93	Used for irrigation pumping.
	Minidoka irrigation district	Dec. 2, 1916	Indefinite	250	0.3	None	6,395.22	Light and power.
	Paul Electric Co.	Feb. 4, 1924	Mar. 31, 1934	271	4 to 1½	\$2 gross per kilowatt	1,126.12	
	Rural Electric Co.	Mar. 19, 1917	Mar. 31, 1927	24	4 to 1½	do.	2,713.26	
	Unity Light & Power Co.	do.	Mar. 19, 1927	62	4 to 1½	do.	1,980.22	Power used starting Apr. 20, 1925, for American Falls Dam construction.
	Utah Construction Co.	Jan. 23, 1925	June 30, 1927	200	3 to 0.9	\$1.80 per horsepower	5,532.78	Light and power.
	Village of Albion	Oct. 15, 1915	Jan. 8, 1926	80	3 to 0.9	\$2 gross per kilowatt	2,084.70	Electric heat.
	do.	Sept. 18, 1916	do.	314	Flat rate.	\$1.25 per kilowatt	3,960.00	Each less than \$1,000.
	Village of Declo	Oct. 26, 1920	Nov. 1, 1930	55	4 to 1½	\$2 gross per kilowatt	13,979.99	
	Village of Heyburn	Mar. 9, 1920	Jan. 1, 1930	118	4 to 1½	do.	46,568.00	New contract not completed.
	Village of Minidoka	Feb. 5, 1925	Apr. 1, 1934	17	4 to 1½	\$330	10,874.57	
	59 small contracts			160	4 to 1½	\$2 gross per kilowatt	1,455.91	
Newlands	Canyon Power Co.	Jan. 29, 1923	Nov. 30, 1934	1,500	0.4 to 0.3	\$1,200 April to September, inclusive.	2,306.50	
Williston	City of Williston	Sept. 25, 1922	Sept. 25, 1932	600	5½ to 2	\$3,300	4,528.21	
North Platte	City of Mitchell, Nebr.	May 1, 1925	June 30, 1929	135	8 to 1	\$202.50	1,771.70	
	City of Torrington, Wyo.	May 10, 1923	May 10, 1925	125	8 to 1	\$187.50	3,807.53	
	Platte Valley Power Co.	May 1, 1922	May 1, 1929	25	8 to 1	\$87.50	6,649.60	
	Security Land Co.	Feb. 9, 1922	Feb. 9, 1927	25	8 to 1	\$37.50	1,541.59	
	Town of Lingle, Wyo.	Nov. 29, 1924	June 30, 1929	30	8 to 1	\$175	10,427.52	
	Village of Morrill, Nebr.	May 1, 1925	do.	55	8 to 1	\$82.50	8,580.21	
	Town of Guernsey, Wyo.	Sept. 27, 1924	do.	125	8 to 1	\$500	1,829.12	
	Town of Wheatland, Wyo.	Sept. 11, 1924	do.	140	8 to 1	\$800	3,348.79	
Riverton	F. H. Roberts	May 20, 1925	May 19, 1930	140	8 to 1	\$500		
Shoshone	Town of Powell, Wyo.	Sept. 26, 1923	Sept. 30, 1926	75	6 to 1	\$112.50		
	Chicago, Burlington & Quincy R. R. Co.	June 1, 1923	Jan. 11, 1934	20	6 to 1	\$30		
Strawberry Valley	Spanish fork city	May 1, 1925	Apr. 30, 1928	185	6 to ¾	\$740		
	Payson city	Feb. 4, 1925	Feb. 3, 1928	125	6 to ¾	\$800		
	Salem city	do.	do.	30	6 to ¾	\$120		
	Springville city	June 15, 1923	July 25, 1926	125	2 to 1	\$50		

DRAINAGE

Estimate of seepage and summary of drainage work to June 30, 1935

State and project	Constructed drains ¹		Estimated area damaged by seepage on June 30, 1925	Estimated area protected by constructed drains	Estimated area that will be protected when all drains authorized have been constructed
	Open	Closed			
	Miles	Miles	Acres	Acres	Acres
Arizona: Salt River ²	15.85	5.30	-----	60,000	60,000
Arizona-California: Yuma—					
Reservation.....	11.70	4.00	-----	8,000	8,000
Yuma Valley.....	37.30	-----	500	31,500	50,000
Colorado: Grand Valley—					
Project lands.....	35.03	0.48	400	5,230	6,000
Grand Valley drainage district.....	38.30	1.00	29,000	10,000	10,000
Teller Institute.....	2.80	-----	-----	300	300
Frey drain.....	1.60	-----	-----	300	300
Orchard Mesa.....	9.06	.24	500	1,500	1,500
Uncompahgre ³	-----	97.00	17,000	9,600	9,600
Idaho: Boise—					
Riverside irrigation district.....	44.10	-----	350	11,400	11,400
Pioneer irrigation district.....	78.50	.40	300	30,000	30,000
Nampa-Meridian irrigation district.....	45.76	-----	400	51,000	51,000
Other parts.....	61.44	.10	3,000	10,600	17,200
King Hill ³.....	.88	-----	180	800	800
Minidoka—					
Gravity division.....	110.70	-----	1,400	30,000	30,000
Pumping division.....	-----	-----	2,000	-----	-----
Montana: Huntley.....	16.73	50.50	1,200	21,500	21,500
Milk River—					
Malta division.....	2.30	-----	2,300	300	300
Glasgow division.....	-----	-----	200	-----	-----
Sun River—					
Fort Shaw division.....	-----	-----	2,872	-----	-----
Grenfields division.....	21.40	-----	50	11,600	11,600
Montana-North Dakota: Lower Yellowstone.....	5.00	1.10	4,000	1,600	1,600
Nebraska-Wyoming: North Platte—					
Interstate division.....	41.62	12.48	2,400	8,000	8,200
Interstate division ⁴	43.26	-----	-----	-----	-----
Fort Laramie division ⁵	124.64	-----	700	16,000	18,000
Northport division.....	8.05	-----	50	1,500	2,500
Nevada: Newlands—					
Carson division.....	161.08	3.99	-----	77,300	⁶ 91,392
Truckee division.....	10.84	-----	-----	3,470	⁶ 13,940
New Mexico: Carlsbad.....	11.14	3.65	5,400	5,140	5,140
New Mexico-Texas: Rio Grande—					
Rincon division.....	26.57	-----	5,000	9,000	14,000
Leasburg division.....	66.34	-----	3,000	31,000	31,000
Mesilla division ⁷	119.11	-----	5,000	47,000	47,000
El Paso division ⁷	121.39	-----	8,000	53,000	58,000
Oregon: Umatilla.....	13.25	-----	350	3,000	3,000
Klamath—					
Main division.....	103.00	8.00	2,000	28,700	30,000
Tule Lake division.....	52.00	-----	200	12,000	24,000
South Dakota: Belle Fourche.....	-----	-----	10,000	-----	-----
Utah: Strawberry Valley ⁸	18.90	71.50	8,500	11,422	19,922
Washington: Yakima—					
Sunnyside division ⁸	82.85	95.07	9,000	51,298	51,298
Tieton division ⁸	7.50	2.30	200	2,400	2,400
Wyoming: Shoshone—					
Garland division.....	105.06	111.81	2,400	32,000	34,000
Frannie division.....	75.94	-----	2,100	10,500	12,000
Willwood division.....	10.51	-----	-----	3,000	3,000
Total.....	1,736.50	⁹ 468.92	129,952	700,960	789,892

¹ Surface drains and waste ditches not included.

² Drainage is largely by means of pumps, water recovered being used for irrigation purposes.

³ Constructed by landowners, water users, or drainage districts.

⁴ Outlet channels, of which 7.74 miles were built by the United States as part of the project drainage, 17.35 miles by the United States under cooperative contracts, 16.17 miles by the Farmers' irrigation district, and 2 miles by the Morrill drainage district.

⁵ Outlet channels, of which 56.68 miles were built by the United States as a part of the project drainage and 5.25 miles by the United States under cooperative contract.

⁶ Area benefited.

⁷ Abandoned temporary outlets not included.

⁸ All drainage work done by county drainage engineer through drainage improvement districts.

⁹ Decrease in length of closed drains due to opening 2.12 miles of closed drains on North Platte project.

SETTLEMENT DATA

State and project	Irrigated farms		Towns		Number of schools, project and towns	Number of churches
	Number	Population	Number	Population		
Arizona: Salt River.....	6,300	39,000	12	55,000	65	66
Arizona-California: Yuma.....	1,460	3,600	5	6,900	17	15
California: Orland.....	673	1,750	1	1,700	10	7
Colorado:						
Grand Valley.....	453	1,215	6	11,246	24	32
Uncompahgre.....	1,599	5,822	3	7,400	26	27
Idaho:						
Boise.....	3,500	10,800	10	36,660	48	58
King Hill.....	188	655	4	1,818	6	5
Minidoka.....	2,453	7,197	6	6,920	23	30
Montana:						
Huntley.....	557	1,822	8	530	8	9
Milk River.....	171	743	15	7,025	24	35
Sun River.....	441	1,059	4	397	17	11
Montana-North Dakota: Lower Yellowstone.....	390	1,567	8	2,560	16	15
Nebraska-Wyoming: North Platte.....	2,274	6,340	18	18,900	102	60
Nevada: Newlands.....	762	2,668	5	2,300	² 11	9
New Mexico: Carlsbad.....	412	2,060	4	3,440	8	12
New Mexico-Texas: Rio Grande.....	4,800	28,000	42	106,000	75	120
North Dakota: Williston.....	60	215	2	4,400	7	7
Oregon: Umatilla.....	534	1,529	4	1,280	6	9
Oregon-California: Klamath.....	600	1,800	5	7,000	24	13
South Dakota: Belle Fourche.....	854	2,020	5	2,350	27	9
Utah: Strawberry Valley.....	2,741	6,500	12	16,200	24	26
Washington:						
Okanogan.....	453	1,261	3	3,000	7	9
Yakima-Sunnyside.....	3,391	9,617	11	7,410	41	30
Yakima-Tieton.....	1,300	3,480	8	² 23,000	10	4
Wyoming:						
Riverton.....			2	2,500	2	7
Shoshone.....	820	1,969	5	1,400	7	8
Total.....	37,186	142,689	208	337,336	935	633

² Includes "Consolidated B" school district at Fallon, counted as 1 school but originally embracing 7 or more school districts.

³ Includes Yakima and Naches, 22,600.

Settlement data—Continued

State and project	Banks				New settlers purchasing or leasing land	Number of settlers and tenants who left during year
	Number	Capital stock	Deposits	Number of depositors		
Arizona: Salt River.....	15	\$1,600,000	\$25,580,000	41,000	-----	-----
Arizona-California: Yuma.....	5	280,000	2,664,300	8,492	18	30
California: Orland.....	2	171,000	1,041,000	2,950	25	30
Colorado:						
Grand Valley.....	6	445,000	3,927,200	12,600	60	30
Uncompahgre.....	6	505,136	3,301,367	11,250	10	100
Idaho:						
Boise.....	13	1,390,000	17,639,000	31,000	100	100
King Hill.....	1	20,000	286,315	950	9	9
Minidoka.....	5	200,000	1,400,000	4,000	50	100
Montana:						
Huntley.....	2	50,000	192,180	750	25	25
Milk River.....	17	675,000	5,036,000	10,300	43	(1)
Sun River.....	3	66,400	147,000	585	15	20
Montana-North Dakota: Lower Yellowstone.....	6	150,000	880,120	2,778	-----	-----
Nebraska-Wyoming: North Platte.....	19	582,500	7,116,570	19,400	68	21
Nevada: Newlands.....	1	75,000	851,639	1,700	25	10
New Mexico: Carlsbad.....	2	85,000	525,000	1,350	14	19
New Mexico-Texas: Rio Grande.....	8	2,000,000	26,500,000	30,000	400	(1)
North Dakota: Williston.....	2	150,000	1,650,000	3,000	2	-----
Oregon: Umatilla.....	1	25,000	290,000	1,200	50	50
Oregon-California: Klamath.....	5	355,000	4,000,000	8,200	-----	-----
South Dakota: Belle Fourche.....	4	135,000	2,125,000	6,000	10	40
Utah: Strawberry Valley.....	5	235,000	1,500,000	7,250	-----	-----
Washington:						
Okanogan.....	4	140,000	1,226,000	2,400	30	28
Yakima-Sunnyside.....	10	285,000	2,377,944	9,239	150	100
Yakima-Tieton.....	4	-----	-----	-----	175	150
Wyoming:						
Riverton.....	5	135,000	1,000,000	2,800	-----	-----
Shoshone.....	3	85,000	366,000	1,473	-----	35
Total.....	151	9,840,036	111,622,635	220,667	1,279	897

¹ Number of owners and tenants who left project can not be accurately determined but there were very few.

⁴ Only 1 small bank at Tieton which handles a small per cent of business.

CROP STATISTICS

Summary of crop reports on Government reclamation projects in 1924¹—Area (acres)²

State and project	Cereals					Other grain and seed						Hay and forage							
	Barley	Corn, Indian	Oats	Rye	Wheat	Total	Alfalfa seed	Clover seed	Sorghum grain	Flax seed	Millet seed	Total	Alfalfa hay	Clover hay	Other hay	Corn fodder	Other forage	Pasture	Total
Arizona: Salt River	9,607				6,254	15,861	11,507		1,438			12,945	65,368		4,513		10,589	42,945	123,415
Arizona-California: Yuma	74	51	31		509	665						12,945	17,512		10,086	44		1,922	29,564
California: Orland	225		2		84	311			138			138	5,694		239	25	18	1,528	7,504
Colorado:																			
Grand Valley		736	544		675	1,955	192					192	5,995		38	682	2,527	243	9,485
Uncompahgre	127	2,475	4,469	23	6,795	13,889	552	71				623	25,528	179	315	222	456	4,824	31,114
Odaho:																			
Boise	6,137	7,086	2,899	37	15,437	31,596	966	3,520	3	11	5	4,505	47,458	5,083	1,024	1,579	973	13,373	69,490
King Hill	49	339	41		182	611	760	16				776	3,875	20	10	26		370	4,301
Minidoka																			
Gravity division	2,216	3,304	1,104	21	3,819	10,464	111	358				469	22,654	1,455	75	296		5,229	29,709
Pumping division	2,229	471	795		4,720	8,215	25	1,318				1,343	15,608	745		200		3,051	19,604
Montana:																			
Huntley	222	956	912	7	2,212	4,309	56	228			6	280	5,724	65	12	398	1	14,944	21,144
Milk River	20	311	808		1,036	2,175	115			99		214	3,606		2,298	35	520	63	11,522
Sun River																			
Fort Shaw division	104	60	325	12	677	1,178		10				10	5,010	89	128	294	2	1,074	6,597
Greenfields and Big Coulee divisions	467	2	1,424		15,424	17,317		103		34		137	3,140	330	705	525		187	4,887
Montana-North Dakota: Lower Yellowstone	159	370	316	2	90	937		10		52		62	4,275	38	122	292		271	5,998
Nebraska-Wyoming: North Platte																			
Interstate division	7,642	17,472	4,265	217	2,080	31,676		1,016			101	1,117	23,355	576	395	109		3,472	27,907
Fort Laramie division	2,396	9,270	6,590		4,345	22,601							8,287	257				8,544	
Northport division	546	4,015	1,279	91	600	6,531							908		249			1,157	
Nevada: Newlands	297	259	62		4,081	4,699							31,820		157		14,370	3,625	49,972
New Mexico: Carlsbad							1,228						4,526					295	4,821
New Mexico-Texas: Rio Grande	50	3,303	95	1	663	4,112	41					41	25,411	4	2,053	520	1,233	4,522	33,743
North Dakota: Williston	5	1	30		35	71				18		18	280		172	31	453	122	1,058
Oregon: Umatilla	3	250	3		82	338	2					2	9,698		79	61		1,776	11,614
Oregon-California: Klamath																			
Main division	420		940	250	1,320	2,930							15,500		1,020			11,100	27,620
Tule Lake division			80		30	110							520		140			377	1,037

South Dakota: Belle Fourche.....	563	8,638	3,229	689	13,109	1,111	49	84	1,244	21,825	130	1,402	1,402	5,822	9,822	34,581
Utah: Strawberry Valley.....	799	147	1,735	7,484	10,165	63	---	---	63	15,159	205	2,022	2,022	3,456	3,456	26,860
Washington:																
Okanogan.....	---	12	---	---	12	---	---	---	---	359	---	3	17	---	34	413
Yakima.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sunnyside division.....	312	5,417	608	3,953	10,290	---	---	---	---	38,033	---	726	92	436	8,291	47,578
Tieton division.....	454	1,020	271	1,278	3,023	---	92	---	92	9,615	---	520	119	283	2,761	13,298
Wyoming:																
Shoshone.....	705	230	2,105	1,985	5,025	---	325	---	342	16,639	71	167	123	2,218	2,335	21,553
Garland division.....	53	215	609	322	1,199	140	290	---	430	3,575	---	94	34	353	446	4,502
Frankie division.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total.....	35,871	66,410	35,571	661	86,861	16,859	7,406	1,579	26,271	457,957	9,247	33,764	7,292	39,874	142,458	690,592

State and project	Vegetables and truck						Fruits and nuts									
	Beans	Onions	Potatoes (white)	Potatoes (sweet)	Truck	Total	Apples	Peaches	Pears	Prunes	Citrus fruit	Small fruit	Miscellaneous	Total		
Arizona: Salt River.....	311	521	242	---	10,067	11,141	---	---	---	---	2,228	1,328	1,573	5,129		
Arizona-California: Yuma.....	---	80	---	---	509	589	---	---	---	---	9	20	117	1,146		
California: Orland.....	---	---	4	---	1	5	3	44	8	256	304	197	1,617	2,429		
Colorado:																
Grand Valley.....	810	42	744	---	244	1,800	---	243	---	---	---	69	---	243		
Uncompahgre.....	1,436	1,882	7,624	---	310	11,252	1,727	73	4	2	---	---	---	1,875		
Idaho:																
Boise.....	233	132	5,103	4	439	5,911	1,698	121	19	984	---	99	---	2,921		
King Hill.....	27	1	238	---	110	376	325	17	27	6	---	1	2	378		
Mindoka.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Gravity division.....	1,212	20	3,121	---	615	4,968	63	---	---	---	---	14	---	77		
Pumping division.....	233	8	3,430	---	926	4,597	---	---	---	---	---	10	---	10		
Montana:																
Huntley.....	540	2	21	---	149	712	---	---	---	---	---	---	---	---		
Milk River.....	330	---	56	---	32	418	---	---	---	---	---	1	---	---		
Sun River.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Fort Shaw division.....	65	---	173	---	56	294	---	---	---	---	---	---	---	---		
Greenfields and Big Coulee divisions.....	20	---	46	---	43	109	---	---	---	---	---	---	---	---		
Montana-North Dakota: Lower Yellowstone.....	136	---	110	---	122	368	---	---	---	---	---	---	---	---		
Nebraska-Wyoming:																
North Platte.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Interstate division.....	186	---	5,051	---	293	5,530	---	---	---	---	---	---	---	---		
Fort Laramie division.....	---	---	1,236	---	---	1,236	---	---	---	---	---	---	---	---		
Northport division.....	---	---	64	---	45	109	---	---	---	---	---	---	---	---		
Nevada: Newlands.....	2	---	273	---	984	1,259	---	---	---	---	---	---	---	---		
New Mexico: Carlsbad.....	---	---	---	3	---	3	10	---	---	---	---	---	---	---		

1 Data are for calendar year (irrigation season) except on Salt River project where data are for corresponding "agricultural year" October, 1923, to September, 1924.

2 Figures on Boise and Strawberry Valley projects include a portion of the acreage served under Warren Act for which a crop census was taken.

3 Duty of water from reclamation canals average 0.61 acre-feet per acre; 77 farms more than 50 per cent irrigated; 94 farms less than 50 per cent irrigated.

Summary of crop reports on Government reclamation projects in 1924—Area (acres)—Continued

State and project	Vegetables and truck					Fruits and nuts								
	Beans	Onions	Potatoes (white)	Potatoes (sweet)	Truck	Total	Apples	Peaches	Pears	Prunes	Citrus fruit	Small fruit	Miscellaneous	Total
New Mexico-Texas: Rio Grande.....	279	50	28	309	4, 195	4, 833	412	197	791	---	---	368	9	1, 777
North Dakota: Williston.....	---	2	66	---	29	59	---	---	---	---	---	2	5	2
Oregon: Umatilla.....	---	---	---	---	168	234	455	21	7	17	---	19	---	524
Oregon-California: Klamath—	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Main division.....	---	---	440	1	128	568	2	---	---	---	---	---	---	2
Tule Lake division.....	---	---	10	3	13	---	---	---	---	---	---	---	---	---
South Dakota: Belle Fourche.....	---	---	81	143	224	---	---	---	---	---	---	---	---	---
Utah: Strawberry Valley.....	13	11	414	206	644	---	157	387	2	1	---	69	---	616
Washington: Okanogan.....	---	---	28	---	62	90	3, 525	3	52	1	---	16	---	3, 597
Yakima—	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sunnyside division.....	190	---	6, 587	---	2, 345	9, 122	9, 230	752	1, 552	416	---	906	---	12, 856
Tieton division.....	398	51	907	---	112	1, 468	7, 160	540	1, 772	---	---	350	---	9, 822
Wyoming: Shoshone—	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Garland division.....	1, 046	---	1, 481	---	88	2, 615	34	---	---	---	---	6	---	40
Frammie division.....	70	---	120	---	50	240	---	---	---	---	---	---	---	---
Total.....	7, 537	2, 762	37, 698	316	22, 474	70, 787	24, 801	2, 398	4, 234	1, 683	2, 541	3, 475	3, 323	42, 455
Irrigated, no crop														
State and project	Miscellaneous					Duplicated	Total cropped	Irrigated, no crop						Total irrigated
	Beets, sugar	Cotton	Cane	Other	Total			Young alfalfa	Young fruit	Fall plowing	Miscellaneous	Duplicated		
Arizona: Salt River.....	---	107, 505	---	93	107, 598	47, 714	215, 430	---	808	---	17, 262	---	---	233, 500
Arizona-California: Yuma.....	---	32, 240	---	---	32, 240	23, 029	53, 120	---	---	---	60	---	---	53, 180
California: Orland.....	---	---	---	---	---	417	9, 970	214	1, 704	---	107	25	---	11, 970
Colorado: Grand Valley.....	2, 580	---	---	1, 360	3, 940	5, 015	12, 600	653	10	855	5	663	---	13, 460
Uncompahgre.....	5, 934	---	---	330	6, 264	2, 917	62, 100	2, 205	63	2, 496	449	5, 133	---	62, 180
Idaho: Boise.....	---	---	1	71	72	3, 445	111, 050	278	788	1, 555	1, 767	1, 808	---	113, 630
King Hill.....	---	---	---	---	---	372	6, 070	170	---	---	---	---	---	6, 240

Minidoka—	4,599	172	4,771	118	50,340	437	5,460	55,800
Gravity division	6,951		6,951		40,720		2,243	43,400
Pumping division								
Montana:								
Huntley	5,929	3	10,016	16,691	19,770		170	19,600
Milk River ³	230	4,084	230	30	14,530	368	351	14,600
Sun River							50	
Fort Shaw division	61		61		48,140			7,890
Greenfields and Big Coulee division					22,450			13,740
Montana-North Dakota: Lower Yellowstone	6,590	75	6,665		14,030			14,030
Nebraska-Wyoming:								
North Platte—								
Interstate division	14,320	112	14,680		80,910	2,456	2,484	85,850
Fort Laramie division	6,770	246	9,347	2,668	39,060			39,060
Northport division	997	376	1,373		9,170			9,170
Nevada: Newlands				15,170	40,760		3,520	44,280
New Mexico: Carlsbad	17,984	111	18,235	1,227	23,070	132	1,258	24,460
New Mexico-Texas: Rio Grande	58,721	126	58,850	236	103,120			116,000
North Dakota: Williston	442	3	445	473	1,180	12,880		1,180
Oregon: Umatilla		31	31	233	12,510	405	184	13,130
Oregon-California:						57		
Klamath—								
Main division		400	400		31,520		4,480	36,000
Tule Lake division		30	30		1,190		1,210	2,400
South Dakota: Belle Fourche	1,281	71	1,352	700	49,810			48,400
Utah: Strawberry Valley	7,568	856	8,424	5,732	41,040	207	1,816	43,320
Washington:								
Okanogan		73	73	235	3,950	6	560	4,940
Yakima—								
Sunnyside division	272	820	1,092	2,808	78,130	2,039	11,570	95,000
Tieton division		117	117	3,270	24,550	145	5,575	27,970
Wyoming:								
Shoshone—								
Garland division	2,441	4,684	6,925	6,900	29,600	345	286	29,700
Frankie division	356	1,295	1,651	1,302	6,720	9	21	6,750
Total	67,123	259	301,833	140,702	1,216,610	10,069	49,344	1,290,890

³ Duty of water from reclamation canals, average 0.61 acre-foot per acre; 77 farms more than 50 per cent irrigated; 94 farms less than 50 per cent irrigated.

⁴ Considerable area cropped without irrigation.

State and project	Cereals					Other grains and seed						Hay and forage						
	Barley	Corn, Indian	Oats	Rye	Wheat	Total	Alfalfa seed	Clover seed	Sorghum grain	Flax seed	Millet seed	Total	Alfalfa hay	Clover hay	Other hay	Corn fodder	Other forage	Total
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Tons	Tons	Tons	Tons	Tons	Tons
Arizona: Salt River	380,277				177,203	557,480						101,460	285,100		12,940		47,790	345,830
Arizona-California: Yuma	1,756	1,275	837		14,233	18,101	59,360		41,600			101,460	42,730		9,290		130	52,150
California: Orland	3,500		50		950	4,500			3,560			3,560	7,338		212		53	7,639
Colorado:																		
Grand Valley		12,055	13,019		13,546	38,620		572				572	17,100			2,705		19,805
Uncompahgre	1,788	45,700	123,670	955	178,602	350,715	1,446	158				1,604	56,515	206	367	544	274	57,906
Idaho:																		
Boise	263,490	167,656	89,670	492	412,772	934,080	1,760	8,953			25	10,738	90,334	6,458	980	5,762	2,035	105,569
King Hill	2,470	9,457	1,625		4,012	17,564	4,435	121				4,556	13,127	41	15	42		13,225
Mindoka																		
Gravity division	65,420	73,000	35,845	410	95,445	270,120	270	1,394				1,664	63,440	3,640	112	1,186		68,378
Pumping division	51,360	7,070	23,370		106,170	187,970	66	3,536				3,602	36,360	936		490		37,786
Montana:																		
Humbley	8,886	15,590	34,154	154	53,386	112,170	54	922			12	988	13,500	170	10	1,040	10	13,730
Milk River	300	3,715	18,200		16,475	38,690	46			628		674	7,495		5,760	105		13,360
Sun River																		
Fort Shaw division	2,594	1,030	8,056	200	10,110	21,990		85				85	8,418	120	153	577	16	9,284
Greenfields and Big-Coulee division	6,682	50	30,604		157,684	195,020		782		133		915	5,442	415	455	782		7,094
Montana-North Dakota, Lower Yellowstone	5,110	8,845	13,585	60	2,250	29,850		30		570		600	11,210	46	200	603		12,119
Nebraska-Wyoming:																		
North Platte																		
Interstate division	205,240	282,470	127,393	2,136	30,951	648,190		1,433			687	2,120	41,288	418	327	397		42,430
Fort Laramie division	54,695	136,170	201,912		87,773	480,550							10,760					10,760
Northport division	10,980	46,560	32,555	692	10,643	101,430							1,830					1,830
Nevada: Newlands	8,670		3,875		89,735	102,280							92,600		260			92,920
New Mexico: Carlsbad							8,110					8,110	15,330					15,330
New Mexico-Texas: Rio Grande	1,810	83,400	2,600	10	13,590	101,410	183					183	82,130	10	5,200	3,250	3,070	93,660
North Dakota: Williston	200	50	1,530		810	2,590		230		230		230	843		322	155	20	1,340
Oregon: Umatilla	100	6,502	130		1,198	7,930	7					7	27,345		75	410		27,830
Oregon-California:																		
Klamath																		
Main division	9,230		17,500	2,720	24,940	54,390							40,600		1,380			41,980
Tule Lake division			2,270		2,840	2,840							1,650			90		1,740
South Dakota: Belle Fourche	11,858	127,848	85,610		11,724	237,040	532	175		395		1,102	30,890	265	1,200	3,345		35,700
Utah: Strawberry Valley	24,435	4,010	64,920		184,915	278,280	130					130	47,935	335	2,665	1,275	1,180	53,420

Summary of crop reports on Government reclamation projects in 1924—Total yields—Continued

State and project	Vegetables and truck					Miscellaneous			
	Beans	Onions	Potatoes, white	Potatoes, sweet	Total	Beets, sugar	Cotton	Cotton-seed	Cane
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Tons</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Tons</i>
Arizona: Salt River.....	2,592	685	20,167	—	23,444	—	43,002,000	86,004,000	—
Arizona-California: Yuma.....	—	—	—	—	—	—	11,660,890	22,730,000	—
California: Orland.....	—	—	—	—	—	—	—	—	—
Colorado:									
Grand Valley.....	10,594	300	98,230	—	109,124	21,682	—	—	—
Uncompangre.....	12,967	518,226	1,214,380	—	1,745,573	43,210	—	—	—
Idaho:									
Boise.....	1,294	29,993	754,373	350	785,980	—	—	—	3
King Hill.....	30	150	24,840	—	25,020	—	—	—	—
Minidoka.....	—	—	—	—	—	—	—	—	—
Gravity division.....	14,796	171	467,379	—	482,346	20,406	—	—	—
Pumping division.....	2,770	960	710,570	—	714,300	21,510	—	—	—
Montana:									
Huntley.....	4,940	180	1,610	—	6,730	58,860	—	—	6
Milk River.....	1,814	—	6,616	—	8,430	1,500	—	—	—
Sun River.....	—	—	—	—	—	—	—	—	—
Fort Shaw division.....	248	—	14,852	—	15,100	360	—	—	—
Greenfields and Big Coulee division.....	183	—	2,475	—	2,660	—	—	—	—
Montana-North Dakota: Lower Yellowstone.....	1,420	—	11,650	—	13,070	63,970	—	—	—
Nebraska-Wyoming:									
North Platte—									
Interstate division.....	1,040	—	860,390	—	861,430	172,710	—	—	507
Fort Laramie division.....	—	—	146,970	—	146,970	72,940	—	—	—
Northport division.....	—	—	4,100	—	4,100	10,280	—	—	—
Nevada: Newlands.....	—	700	22,630	—	23,330	—	—	—	—
New Mexico: Carlsbad.....	—	—	—	150	150	—	7,146,000	12,827,350	778
New Mexico-Texas: Rio Grande.....	2,930	5,180	—	—	42,900	—	23,807,580	50,483,350	6
North Dakota: Williston.....	—	575	4,000	34,880	4,575	3,910	—	—	—
Oregon: Umatilla.....	—	—	6,290	—	6,290	—	—	—	—
Oregon-California:									
Klamath—									
Main division.....	—	—	45,500	—	45,500	—	—	—	—
Tule Lake division.....	—	—	1,060	—	1,060	—	—	—	—
South Dakota: Belle Fourche.....	—	—	5,340	—	5,340	9,860	—	—	—
Utah: Strawberry Valley.....	130	3,622	42,498	—	46,250	53,560	—	—	—
Washington:									
Okanogan.....	—	—	3,695	—	3,695	—	—	—	—
Yakima—									
Sunnyside division.....	4,390	—	1,929,460	—	1,933,850	344	—	—	—
Tieton division.....	4,130	15,000	169,250	—	188,360	—	—	—	—

Summary of crop reports on Government reclamation projects in 1924—Total crop values—Continued

State and project	Cereals						Other grain and seed						
	Barley	Corn, Indian	Oats	Rye	Wheat	Total	Alfalfa seed	Clover seed	Sorghum grain	Flax seed	Millet	Total	
Oregon-California:													
Klamath—													
Main division.....	\$8,304		\$10,500	\$3,046	\$37,410	\$59,260							
Tule Lake division.....			1,360		855	2,215							
South Dakota: Belle Fourche.....	8,301	\$127,849	42,805		14,655	193,610	\$6,916	\$788				\$8,487	
Utah: Strawberry Valley.....	24,435	4,010	48,692		277,373	354,510	1,170					1,170	
Washington:													
Okanogan.....		610				610							
Yakima—													
Sunnyside division.....	8,710	221,876	25,607		96,505	352,698							
Tieton division.....	10,162	36,145	6,889		35,880	89,086		4,147				4,147	
Wyoming:													
Shoshone—													
Garland division.....	14,209	1,848	33,056		44,946	94,059		5,720			\$62	5,782	
Frammie division.....	546	1,428	6,617		4,789	13,380	1,740	5,164				6,904	
Total.....	825,070	1,209,450	564,757	7,345	2,393,871	5,000,493	730,387	207,007	\$74,858	4,567	1,550	1,018,369	
State and project	Hay and forage						Vegetables and truck						
	Alfalfa hay	Clover hay	Other hay	Corn fodder	Other forage	Pasture	Total	Beans	Onions	Potatoes, white	Potatoes, sweet	Truck	Total
Arizona: Salt River.....	\$4,825,830		\$170,616		\$564,320	\$608,648	\$6,229,414	\$13,995	\$7,034	\$36,300		\$3,035,850	\$3,038,179
Arizona-California: Yuma.....	640,840		75,161	\$997		22,872	739,870		5,615			105,882	105,882
California: Orland.....	132,082		4,240	1,060	648	6,230	144,260			900		160	1,060
Colorado:													
Grand Valley.....	172,470		595	21,740	6,320	2,430	203,555	31,482	450	85,924		19,008	136,864
Uncompahgre.....	445,695	\$1,025	2,642	2,675	1,483	21,556	475,076	32,031	308,424	334,587		21,814	696,856
Idaho:													
Boise.....	984,245	60,157	7,602	17,014	13,827	120,194	1,203,039	3,618	21,614	297,835	\$1,050	24,021	348,138
King Hill.....	131,495	410	150	329		5,552	137,936	119	300	14,544		3,438	18,401
Minidoka—													
Gravity division.....	634,388	29,118	448			36,542	706,429	35,510	171	233,690		25,292	294,663
Pumping division.....	363,580	7,488		2,450		34,350	407,868	6,645	960	355,284		17,833	380,822

Summary of crop reports on Government reclamation projects in 1924—Total crop values—Continued

State and project	Fruit and nuts						Miscellaneous						Grand total	
	Apples	Peaches	Pears	Prunes	Citrus fruit	Small fruit	Miscellaneous	Total	Beets, sugar	Cotton	Cane	Other		Total
Arizona: Salt River					\$852, 210	\$376, 100	\$353, 925	\$1, 582, 235		\$10, 646, 100		\$11, 160	\$10, 657, 260	\$22, 091, 850
Arizona-California: Yuma					210	100	23, 242	23, 552		2, 987, 847			2, 987, 847	4, 504, 090
California: Orland	\$188	\$2, 076	\$165	\$16, 864	8, 750	3, 638	38, 094	69, 775						224, 950
Colorado:														
Grand Valley		19, 413						19, 413	\$173, 460			7, 534	180, 994	587, 430
Uncompahgre	107, 316	7, 467	371	224		9, 913		125, 291	324, 082			16, 088	340, 170	1, 941, 600
Idaho:														
Boise						8, 238		158, 226						2, 708, 740
King Hill	87, 047	11, 993	860	50, 088		299		3, 488			\$15	2, 062	2, 077	2, 708, 740
Minidoka	5, 086	53	50											224, 630
Gravity division						690	9, 185	11, 037	122, 438				122, 438	1, 446, 280
Pumping division	1, 162					1, 755		1, 755	150, 570				150, 570	1, 186, 910
Montana:														
Huntley														
Milk River						30		30	11, 280				11, 280	827, 520
Sun River									2, 888				2, 888	177, 360
Fort Shaw division														111, 460
Greenfields and Big Cou-														
lee division														290, 230
Montana-North Dakota: Lower														
Yellowstone									383, 820			12, 806	396, 626	548, 400
Nebraska-Wyoming:														
North Platte														
Interstate division														
Fort Laramie division														
Northport division														
Newlands														
Nevada: New Mexico: Carlsbad	605					37, 785	11, 875	605		1, 871, 300	3, 920	3, 908	1, 879, 128	2, 239, 900
New Mexico-Texas: Rio Grande	241	12, 454	97, 690			1, 640		160, 045		7, 010, 952	120	21, 348	7, 032, 420	9, 624, 570
North Dakota: Williston														
Oregon: Umatilla						1, 230		3, 040	29, 590			487	30, 077	60, 450
Oregon-California:												250	250	334, 860
Klamath														
Main division	400							400				10, 000	10, 000	762, 890
Tule Lake division												750	750	29, 680
South Dakota: Belle Fourche									86, 249				87, 402	597, 090
Utah: Strawberry Valley	12, 103	53, 024	920	30		7, 077		73, 154	374, 892			52, 641	427, 533	1, 519, 160

Irrigation and crop results, Government reclamation projects, 1924¹

State and project	Lands on projects covered by crop census ²				Other lands served by Government works, usually a partial water supply through private canals under Warren Act contracts						
	Irrigable acreage ³	Irrigated acreage	Cropped acreage ⁴	Crop value		Irrigable acreage	Irrigated acreage	Cropped acreage	Crop value		Approximate percentage of total water used supplied by United States
				Total	Per acre				Total	Average per acre	
Arizona: Salt River ⁵	236,000	233,500	215,430	\$22,091,850	\$102.55	779,600	3,800	1,790	\$154,440	\$86.28	100
Arizona-California: Yuma.....	70,500	53,180	53,120	4,504,090	84.80	4,150	1,830				
California: Orland.....	20,660	11,970	9,970	224,950	22.57						
Colorado:											
Grand Valley.....	30,000	13,460	12,600	587,430	46.60	16,750	11,790	11,000	1,500,000	136.40	100
Uncompangre.....	95,200	62,180	62,100	1,941,600	31.26	1,310	1,170	1,170	46,800	40.00	100
Idaho:											
Boise ²	144,200	113,630	111,050	2,708,740	24.40	139,380	125,900	119,560	2,736,900	22.89	15
King Hill.....	16,890	6,240	6,070	224,630	37.04						
Minidoka.....						650,000	515,000	485,000	21,400,000	44.00	10
Gravity division.....	72,610	55,800	50,340	1,446,280	28.73						
Pumping division.....	48,960	43,400	40,720	1,186,910	29.15						
Montana:											
Huntley.....	32,540	19,600	19,770	827,520	41.86						
Milk River ⁸	64,800	14,600	14,530	177,360	12.21	41,100	25,900	25,900	355,500	13.70	
Sun River.....											
Fort Shaw division.....	57,160	⁹ 7,890	8,140	111,460	13.69						
Greenfields and Big Coulee division ¹⁰		⁹ 13,740	22,450	290,230	12.93						
Montana-North Dakota: Lower Yellowstone ¹¹	58,000	14,030	14,030	548,400	39.10						
Nebraska-Wyoming:											
North Platte.....	202,980					127,115	106,840	106,840	3,577,810	33.50	
Interstate division.....		85,850	80,910	2,343,110	28.96						
Fort Laramie division.....		39,060	39,060	991,720	25.38						
Northport division.....		9,170	9,170	176,820	19.28						
Nevada: Newlands.....	72,625	44,280	40,760	1,405,120	34.47						
New Mexico: Carlsbad.....	25,045	24,460	23,070	2,239,900	97.10						
New Mexico-Texas: Rio Grande.....	142,000	116,000	103,120	9,624,570	93.34	16,000	9,200	8,960	1,049,780	117.23	
North Dakota: Williston.....	7,650	1,180	1,180	60,450	51.23						
Oregon: Umatilla.....	24,470	13,130	12,510	334,860	26.76						

Oregon-California:												
Klamath	42,590	36,000	31,520	762,890	24.20	11,310	8,900	12,8,900	217,800	24.48		
Man division		2,400	1,190	29,680	25.00							
Tule Lake division		9 48,400	49,810	597,090	11.98							
South Dakota: Belle Fourche	81,870	43,320	41,040	1,519,100	37.01			(1)				
Utah: Strawberry Valley 2	53,890											
Washington:												
Okanogan	7,500	4,940	3,950	699,600	177.11							
Yakima												
Sunnyside division	102,350	95,000	78,130	4,923,820	63.02	151,170	120,340	120,340	12,057,730	100.00		
Tieton division	32,000	27,970	24,550	3,194,820	130.16							
Wyoming:												
Shoshone	63,240	29,760	29,600	617,230	20.86							
Garland division		6,750	6,720	96,270	14.41							
Frankie division												
Total	1,805,730	1,200,890	1,213,610	66,488,560	54.65	1,237,885	930,670	889,400	14 43,237,470	49.28		

¹ Data are for calendar year (irrigation season) except on Salt River project, where data are for corresponding "agricultural year," October, 1923, to September, 1924.

² Figures on Boise and Strawberry Valley projects include portions of acreages, and values of crops therefrom, served under Warren Act, for which a crop census was taken.

³ Areas Bureau of Reclamation was prepared to supply water.

⁴ Irrigated crops. Excludes small areas on few projects cropped by dry farming.

⁵ Data furnished by Salt River Valley Water Users' Association, which operates the project.

⁶ Includes 10,248 acres reported as vacant; 3,400 acres of "home tracts"; and 3,548 acres within townships, on which no crops were reported.

⁷ Ultimate irrigable acreage.

⁸ Crop reports covered an additional area of 42,060 acres cropped by dry farming, producing crops worth \$247,560; or \$5.88 per acre.

⁹ Considerable area cropped without irrigation.

¹⁰ Figures are for 240 irrigated farms, which included 2 farms using water, but having no crops.

¹¹ Crop reports covered an additional area of 18,710 acres cropped by dry farming, producing crops worth \$282,730; or \$15.11 per acre.

¹² Crop reports covered an additional area of 44,536 acres of Tule Lake leased lands, cropped without irrigation, producing a total return of \$397,702; or \$8.92 an acre.

¹³ 17,379 acres cropped in the High Line division, and 2,821 acres cropped in the Spanish Fork and Springville-Mapleton divisions, grown by project water only; 24,200 acres cropped in Spanish Fork and Springville-Mapleton divisions were furnished 86 per cent of the water used.

¹⁴ Includes \$140,710 worth of crops on Strawberry Valley project, grown on additional Warren Act lands not covered by crop census.

Summary of crop reports on reclamation projects in 1924

NOTE.—These figures are limited to irrigated crops covered by crop census on Government projects proper, excluding for the most part dry-farm crops, and all crops in most areas served stored water under the Warren Act.

Crop	Acreage cropped		Yields			Crop value		
	Total	Per cent of cropped	Unit	Total	Average per acre	Average per acre	Total	Per cent of total value of all crops
Cereals:								
Barley.....	35,871	3.0	Bushels.....	1,165,500	32.0	\$23.00	\$825,070	1.2
Corn (Indian).....	66,410	5.5	do.....	1,237,331	19.0	18.21	1,209,450	1.8
Oats.....	35,571	2.9	do.....	1,051,548	29.0	10.82	564,757	.9
Rye.....	661		do.....	7,829	12.0	11.11	7,345	
Wheat.....	86,861	7.1	do.....	1,857,167	21.0	27.55	2,393,871	3.6
Total.....	225,374	18.5		5,379,375	24.0	22.20	5,000,493	7.5
Other grain and seed:								
Alfalfa seed.....	16,859	1.4	Bushels.....	77,044	4.5	43.32	730,387	1.1
Clover seed.....	7,403	.6	do.....	21,131	2.9	28.00	297,007	.3
Grain sorghum.....	1,579	.1	do.....	45,130	29.0	47.41	74,853	.1
Flaxseed.....	298		do.....	1,956	6.5	15.32	4,567	
Millet seed.....	129		do.....	849	6.6	12.01	1,550	
Total.....	26,271	2.1		146,140	5.5	39.00	1,018,369	1.5
Hay and forage:								
Alfalfa hay.....	457,957	37.6	Tons.....	1,254,202	2.7	33.21	15,207,721	22.9
Clover hay.....	9,247	.7	do.....	13,223	1.4	12.00	110,963	.2
Other hay.....	33,764	2.8	do.....	43,992	1.3	14.00	458,828	.6
Corn fodder.....	7,292	.6	do.....	22,947	3.1	16.50	120,352	.2
Other forage.....	39,874	3.3	do.....	65,671	1.6	19.05	759,071	1.1
Pasture.....	142,458	11.7				10.13	1,444,148	2.2
Total.....	690,592	56.7		1,400,035		26.21	18,101,083	27.2
Vegetables and truck:								
Beans.....	7,537	.6	Bushels.....	78,055	10.0	28.42	214,221	.3
Onions.....	2,762	.2	do.....	575,712	239.0	135.07	373,056	.6
Potatoes, white.....	37,693	3.1	do.....	6,767,485	180.0	90.96	3,428,847	5.1
Potatoes, sweet.....	316		do.....	35,380	112.0	185.50	58,619	.1
Truck.....	22,474	1.9				188.00	4,063,203	6.1
Total.....	70,787	5.8		7,453,632		115.00	8,137,949	12.2
Fruits and nuts:								
Apples.....	24,801	2.0	Pounds.....	158,080,700	6,374.0	167.00	4,151,640	6.2
Peaches.....	2,338	.2	do.....	10,454,540	4,360.0	117.00	280,553	.4
Pears.....	4,234	.4	do.....	18,925,150	4,470.0	145.00	614,122	.9
Prunes.....	1,633	.1	do.....	4,246,670	2,523.0	72.00	120,811	.1
Citrus fruit.....	2,541	.2	do.....	19,277,000	7,537.0	339.00	861,170	1.3
Small fruit.....	3,475	.3	do.....	22,474,910	6,470.0	198.00	688,580	1.3
Miscellaneous.....	3,323	.3	do.....	8,714,150	2,622.0	131.00	436,321	.6
Total.....	42,455	3.5		242,173,150	5,704.0	170.00	7,153,205	10.8
Miscellaneous:								
Sugar beets.....	67,123	5.5	Tons.....	581,672	8.0	61.70	4,140,813	6.2
Cotton.....	216,450	17.8	Pounds.....	87,616,970	329.0	84.43	22,516,199	33.9
Cottonseed.....				172,044,700	645.0			
Cane.....	259		Tons.....	1,300	5.0	23.60	6,113	
Other crops.....	18,091	1.5				23.02	414,331	.7
Total.....	301,833	24.8				77.00	27,077,461	40.8
Duplication.....	140,702	11.4						
All crops.....	1,216,610	103.0				54.65	66,488,590	100.0

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